ACKNOWLEDGEMENTS

I would like to offer a profound thanks to the following people who either influenced or helped with the compilation of this book:

> Tom Johns, who initiated the idea of this book; Eva Marie Heater and Mike Sweeney for editorial direction; Bill Harrison and Bill Sears for their help with the discography; Phil Feo for the professional job of copying the examples; and to Red, Bill, Wynton and all the great "compers" for their inspiration.

F.M.

OBJECTIVE AND DEDICATION

The majority of teachers in this relatively new arena of jazz education are not primarily keyboardists. This is no astute observation, just statistics. Most jazz educators have received advanced private instruction on their woodwind, brass, string or percussion instrument. Their educational experience with the piano was at best, functional (learn and forget the Star Spangled Banner); at worst, perfunctory (learn and forget all major and harmonic minor scales).

This book is dedicated to those of you with minimal keyboard experience. The material herein has been organized and verbalized in a manner that will result in better voicings overnight if the principles are assimilated and put into practice. And, obviously, if you can help yourself, you can help your students.

For those of you who can identify with any one of the following lamentations:

A. My keyboard experience is minimal so how can I help my pianist?

B. The published piano voicings seem so bland and uninspiring.

C. Publisher X puts out hip charts, but they use only chord symbols for the piano part.

D. My pianist has had x years of classical training . . . how can I help him/her with jazz voicings?

E. I can figure out the tertial textbook harmonies for chord changes, but is there any way to make these sound sophisticated?

F. My pianist plays all chords in root position and seems to be leaping all over the piano. Can you help?

THIS BOOK IS FOR YOU!

Enjoy,

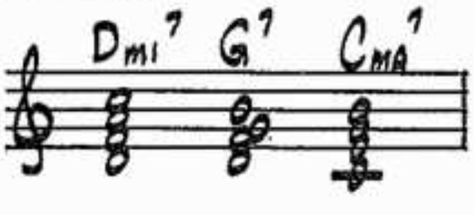
F. Mantooth

FOREWORD

This is not a jazz theory book.

The subject of jazz theory has already been thoroughly examined, analyzed, and expounded upon by various redoubtable authorities, e.g. George Russell, David Baker, and Jerry Coker. This is, rather, a "how to" book. The book covers how to move between adjacent harmonies with minimal motion using good sounding state of the art voicings. The key words here are "good sounding".

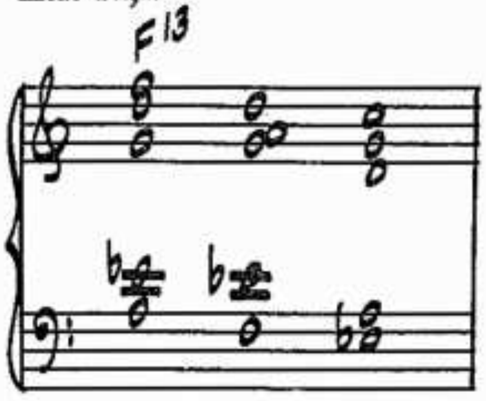
Ex. A,1



The voicings offered in Ex. A,1 are, yes, theoretically correct, and the voice leading is smooth; however, Herbie Hancock or McCoy Tyner would probably not voice this progression in this manner. Although correct, they leave much to be desired in terms of sophistication.

Other texts offer various possible voicings for a given harmony.

Ex. A,2



Ex. A.2 offers three credible voicings for an F13. However, these texts fall short by not explaining which voicing should be used in a particular progression. For example, the way one would voice a F13 in the progression C9 - F13 might be completely different from the F13 voicing used in the progression F13 - D+7(♯9). The variable here is **context.** In other words, consideration must be given to 1, where you're coming from (i.e. the preceding harmony), and 2, where you're going to (i.e. the following harmony).

It is my honest aim to provide the aspiring pianist, arranger, or jazz scholar with a logical approach to the objective of smooth contextual voice leading with good sounding voicings. Regrettably, as with all worthwhile endeavors, study and practice will be necessary to achieve this objective. However, the material will be presented with the intent of easy systematic intellectual assimilation in hopes that undue drudgery can be avoided and that your involvement with music can be a fun and a rewarding experience.

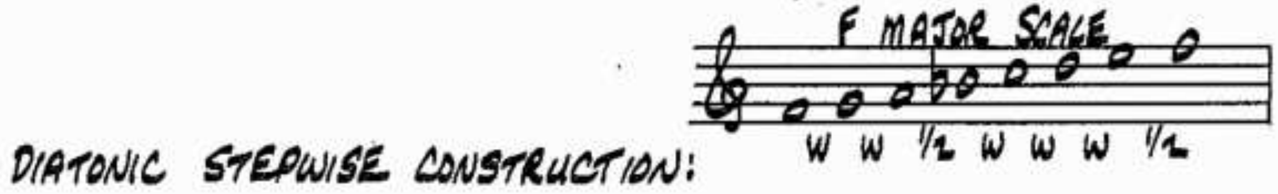
Chapter 1: AN OVERVIEW OF TRADITIONAL JAZZ HARMONY

Jazz harmony, as all harmonic systems that we've come to designate as "Western," is based upon an equally tempered scale which uses the interval of a half step as its smallest unit. Albeit beyond the scope and intent of this book to chronicle the evolution of the Pythagorean scale to our currently used equally tempered scale, I'm still fascinated by the existence of other scales currently used in other civilizations. If we had been born three hundred years earlier, or if we had been raised today in an Eastern culture, say in China, this western notion of dividing an octave into twelve equal divisions would strike our ears as dissonant and unnatural.

The interval of the third is the basic building block of chord structures. Starting on an arbitrary tonic, we stack thirds (every other scale step) above the tonic to create the desired harmony. Incumbent upon the result of our third stacking is, of course, the parent scale or mode. In other words, different harmonies will be initiated depending upon the diatonic parameters of the scale or mode employed.

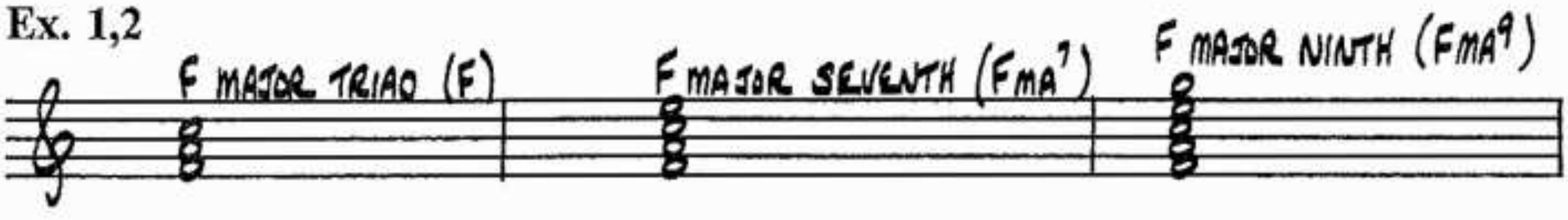
For example, let's pick an arbitrary tonic of "F" and construct a major scale.

Ex. 1,1



Now, let's stack thirds and construct major family harmonies.

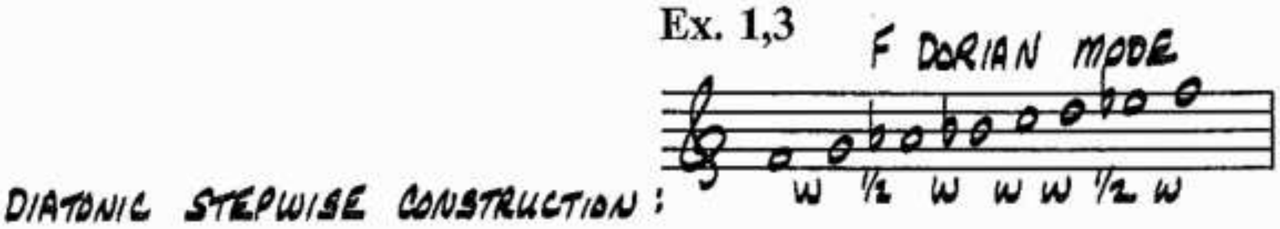
Ex. 1,2



Since the 11th and 13th are dominant family constructions, the major ninth is the largest major family construction possible without chromatically altering the steps of the major scale.

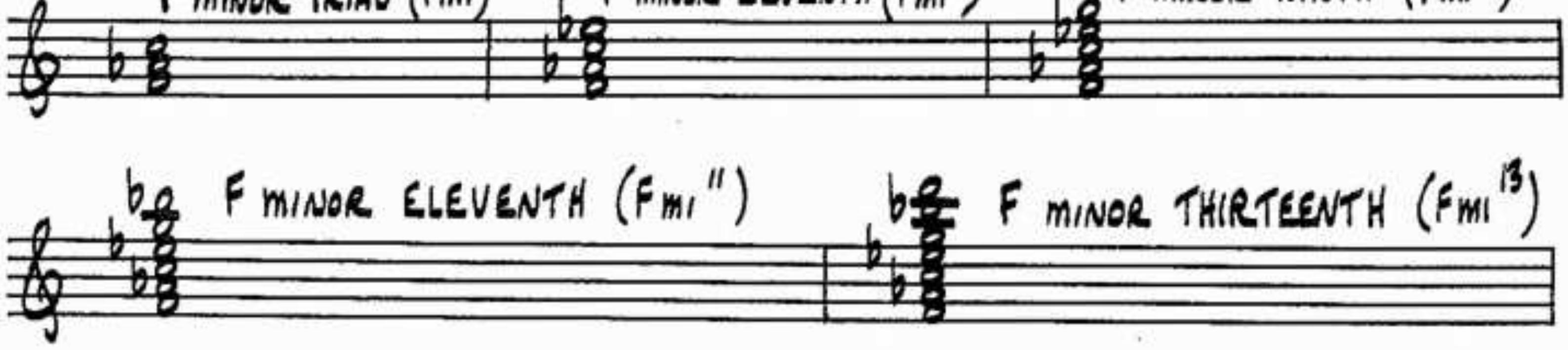
From an "F", let's construct a Dorian mode, the parent scale for minor family harmonies.

Ex. 1,3



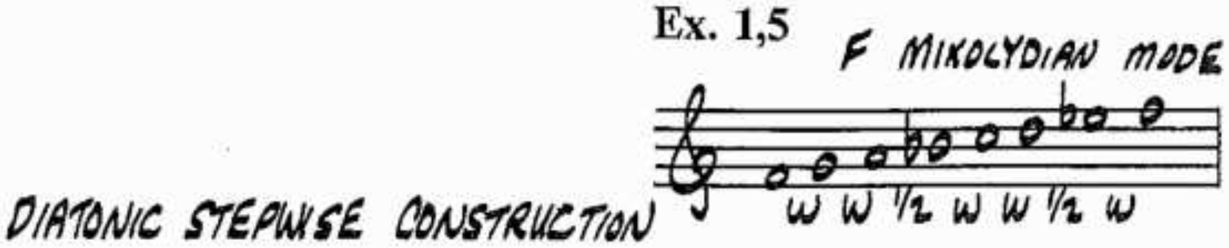
The resultant harmonies from stacking thirds within this diatonic system are:

Ex. 1,4



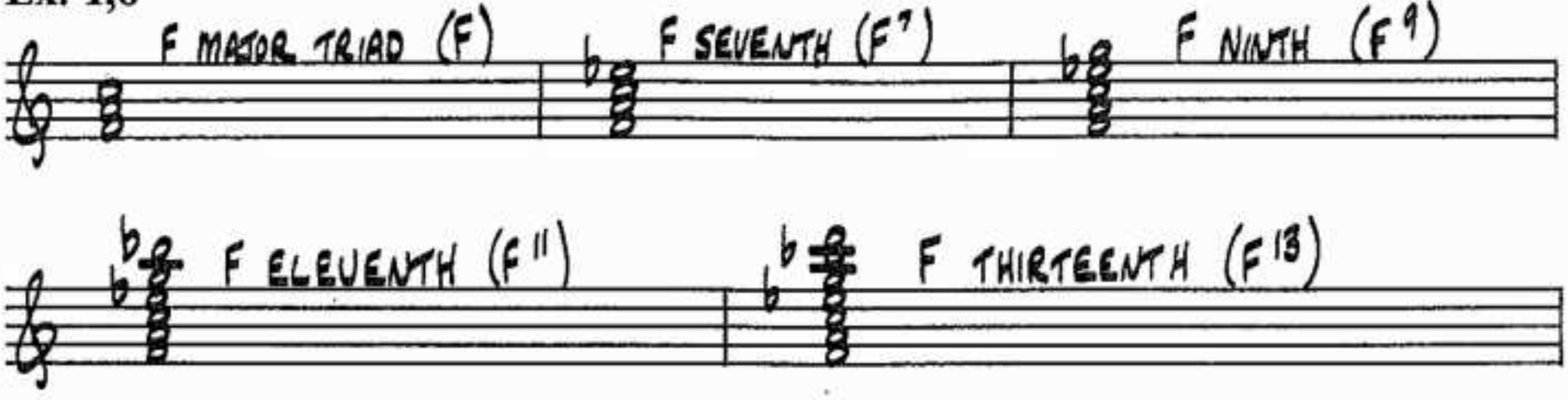
Starting with an "F", let's construct a Mixolydian mode, the parent scale for all dominant family harmonies.

Ex. 1,5



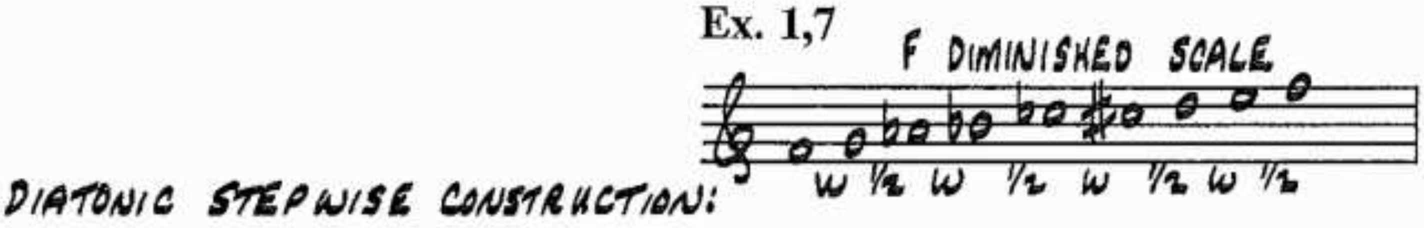
When we stack thirds within this mode, the resultant harmonies are:

Ex. 1,6

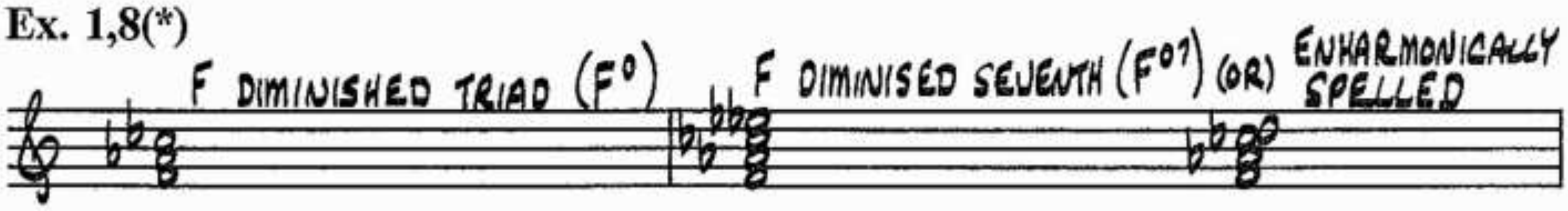


For diminished family chords, let's construct an F diminished scale and see the results of stacking thirds.

Ex. 1,7



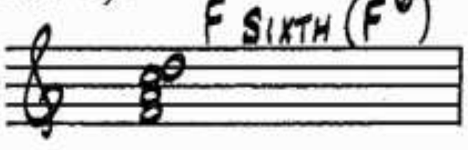
Ex. 1,8(*)



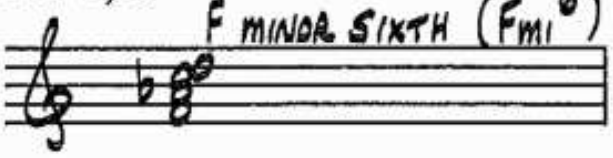
If we are to perceive augmented chords as alterations of major or dominant family constructions (depending on which diatonic system is used for the larger extensions), we have now covered four basic diatonic systems (i.e. Major, Dorian, Mixolydian and Diminished) which govern jazz harmonies.

One frequently heard and encountered exception (aren't there always exceptions) to tertially (see Glossary) constructed (stacked thirds) harmonies is the sixth chord.

Ex. 1,9



Ex. 1,10



Our task is now to inspect alternative ways of voicing these harmonies. A favored means to contemporary sounding voicings is to "detertialize", or rearrange our stacked thirds so that the desired harmony is achieved, but the strict succession of thirds is avoided.

---

*When possible I've tried to adopt the chord constructions and respective designations as espoused by Carl Brandt and Clinton Roemer in their book, **"Standardized Chord Symbol Notation"**. However, with diminished chords, I must take issue with the claim that the ° symbol indicates a 4-voice construction. Granted, in practice, the seventh step of the diminished scale may be played with no adverse tonal repercussions. But, how do we designate a simple diminished triad? The Brandt-Roemer solution of Minor triad with a flatted fifth, is, for my taste, too cumbersome. Therefore, I've elected to "stick to my guns", and refer to the ° symbol as pertinent only to the triad. If a diminished seventh is desired, I'll use the symbol, °7.

Chapter 2: GENERIC VOICINGS

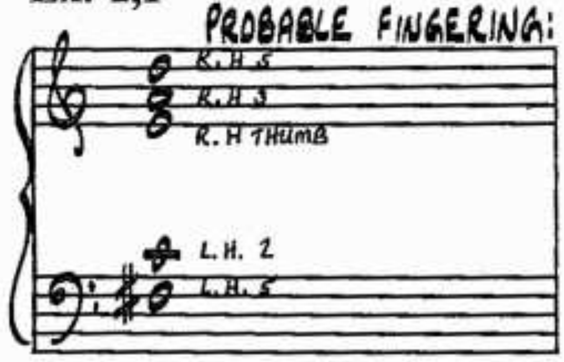
(and the "Rule of Thumb")

Generic Voicings are five-note chord constructions which function for three basic chord families: major, minor, and dominant. They are simple to assimilate, easy to play, and avoid tertiality (see Glossary) while still accommodating the desired harmony.

The Rule of Thumb

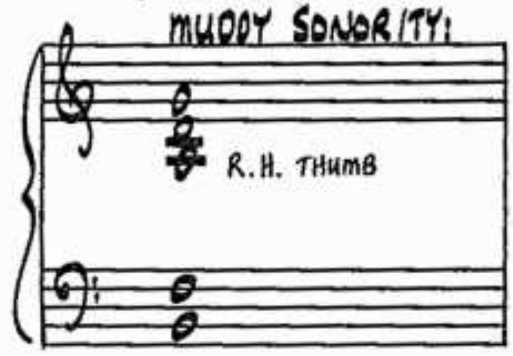
Generally, with 5-voice chord constructions, the top three voices are played by the right hand, the lower two voices by the left. See Ex. 2,1.

Ex. 2,1



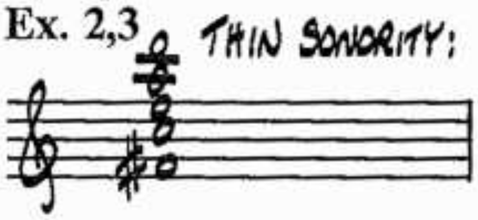
In order to produce the strongest, most resonant sonorities, it's advisable to follow the "Rule of Thumb": Keep the right hand thumb in the octave between middle C and C1 (one octave higher). This rule helps players avoid muddy sonorities that can result when the right hand thumb moves below middle C.

Ex. 2,2



Similarly, when the right hand thumb is above C1, the resulting sonority is generally too thin for comping.

Ex. 2,3



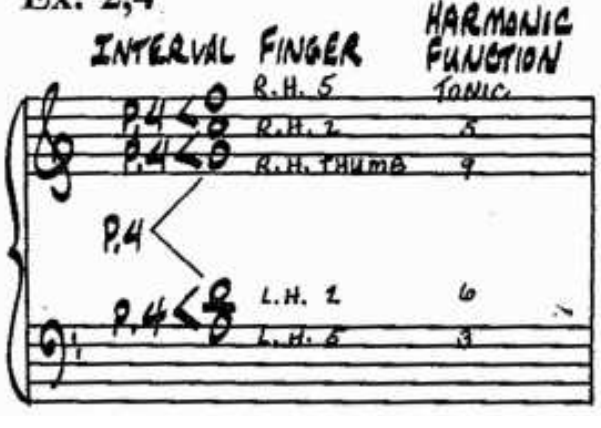
Naturally, certain musical situations may specifically require a higher or lower sonority, but most frequently (particularly when comping), the optimal sonority will be obtained when the "Rule of Thumb" is intact.

Generic voicings relegate all major family chords into the category, "Generic Major". Major family chords include Major triads, Major Sixths, Major Sevenths, Major Ninths, and 6/9 chords.

Application: After determining that a chord does indeed belong to the major family, proceed as follows: First, place, the right hand fifth finger on the root of the chord and the second (or third) finger a perfect fourth lower. Then place the right hand thumb a perfect fourth lower. With the left hand, place the second finger a perfect fourth lower than the right hand thumb and the left hand fifth finger a perfect fourth below that. The result is a five-voice construction built entirely of perfect fourths.

As an example, let's say we see an FMa9 on a chart with no suggested voicing offered. The FMa9 obviously belongs to the major family, so we put our right hand fifth finger on the tonic and proceed as follows:

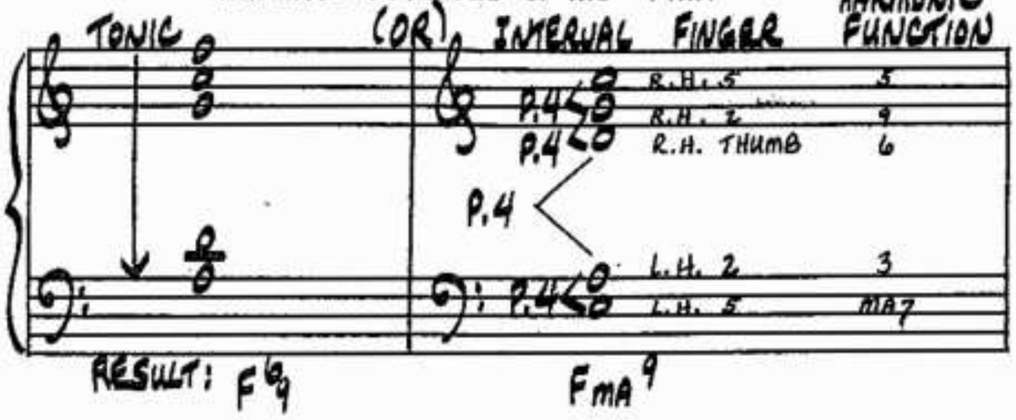
Ex. 2,4



Due to the absence of the Major Seventh, the resulting chord is actually an F6/9. Theoretically, we do not have an exact FMa9; however, there are no offensive chord tones, tertiality has been avoided (in this case, restructured), and the right thumb is between middle C and C1. The chord is in the best position on the keyboard for sonority, and most important, the system works.

Generic Major voicings can also be constructed from the fifth scale tone of a given harmony descending in perfect fourths in a similar fashion as those constructed from the tonic down. For example, our FMa9 can be voiced in two ways:

Ex. 2,5 GENERIC VOICINGS OF AN FMA9

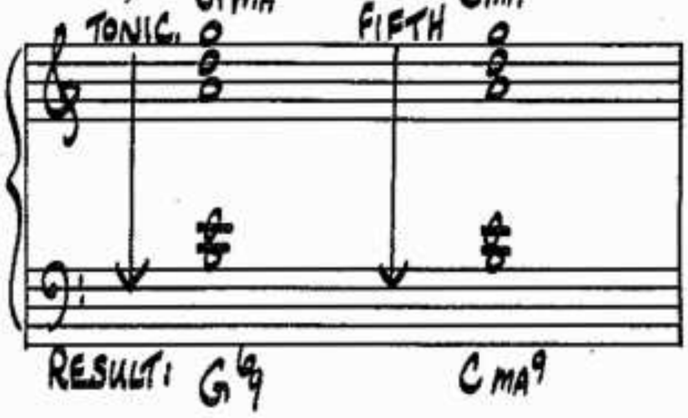


With the generic construction descending from the fifth scale degree, we achieve an exact FMa9, but the point to be stressed is that either voicing is sufficient and context determines which we would use.

Let's observe the cyclical progression IMa - IVMa in the key of G: GMa7 - CMa7.

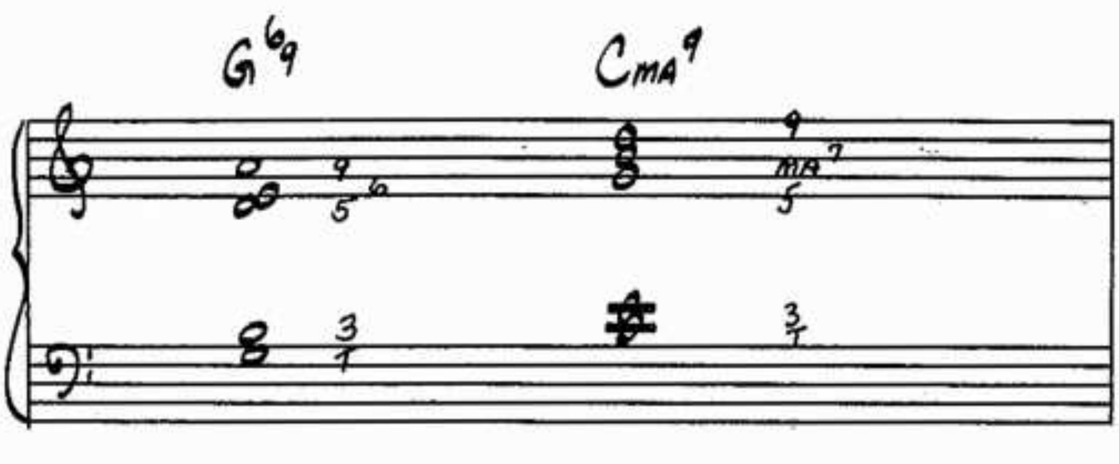
If we generically construct the G Major voicing from the tonic descending, and the C Major voicing from the fifth descending we derive the identical voicing.

Ex. 2,6



Obviously these constructions would similarly function for any two major harmonies whose respective tonics are a fourth apart (e.g. EMa7 - AMa7, D♭Ma9 - G♭Ma9). Since the voicings are identical, voice leading has been minimized (in fact, eliminated), the "Rule of Thumb" has been observed for the sake of sonority, and the resultant voicings sound seemingly more sophisticated than the "third city" (see Glossary) rendition of the same progression.

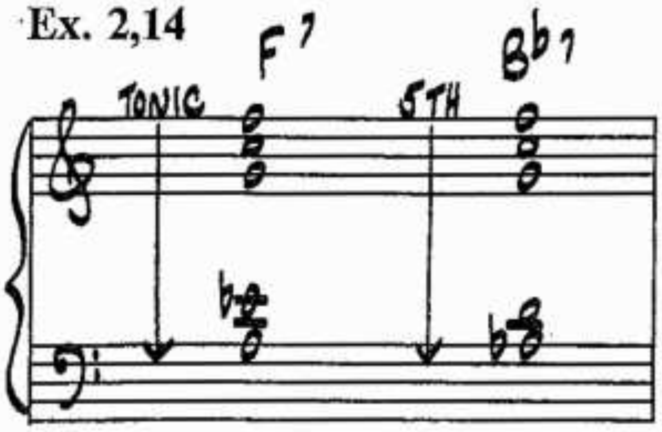
Ex. 2,7 YE OLDE THIRD-CITY RENDITION OF G 6/9 - CMA9



The tritone is reversed with the two different generic dominant constructions; when constructed from the tonic descending, the third is on the bottom. Conversely, when constructed from the fifth descending, the seventh is the lowest voice.

When we approach cyclical dominants, for example F7—Bb7 or I7—IV7, we can construct the F7 from the tonic descending and the Bb7 from the fifth descending to obtain minimal motion between the two voicings.

Ex. 2,14



When voiced in this fashion, only the tritone indicators move while the right hand voices remain stationary. Again, tertiality has been avoided, the right thumb insures optimal sonority by observing the "Rule of Thumb," and minimal motion has been achieved between the adjacent harmonies.

Chapter 2 In A Nutshell:

Objectives:

1. Good sounding voicings that minimize voice leading between two harmonies.
2. "Detertialization" or restructuring of text book tertial harmonies.

Points to Remember

A. All Generic Voicings are 5-note constructions.

B. Generic Majors have two constructions. They may be constructed from either the tonic or the fifth descending in perfect fourths.

C. Generic Minors have one construction: all fourths descending from the minor third.

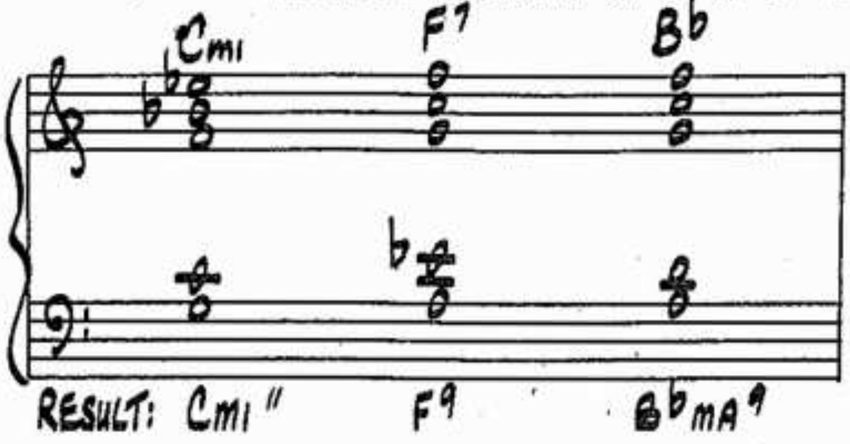
D. Generic Dominants have two constructions. They may be constructed from either the tonic down or the fifth down. The top three voices are quartal with the 3rd and Dominant seventh in the left hand.

E. Observe the "Rule of Thumb" (R.H. Thumb on the middle of the five tones played between middle C and C1). If context requires the R.H. thumb to dip below Middle C, be certain that the tonic replaces the lowest voice of the generic construction. This will be explained later in more detail.

Chapter 3: GENERIC VOICINGS WORKOUT

The most frequently employed progression in jazz and commercial music is the ii-V7-I progression. Let's use Generic Voicings to construct a ii-V7-I progression in B♭.

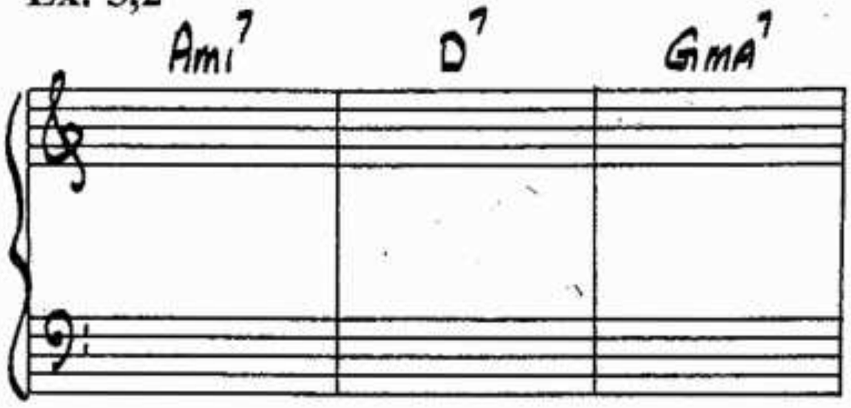
Ex. 3,1 GENERIC VOICINGS OF A ii-V7-I:



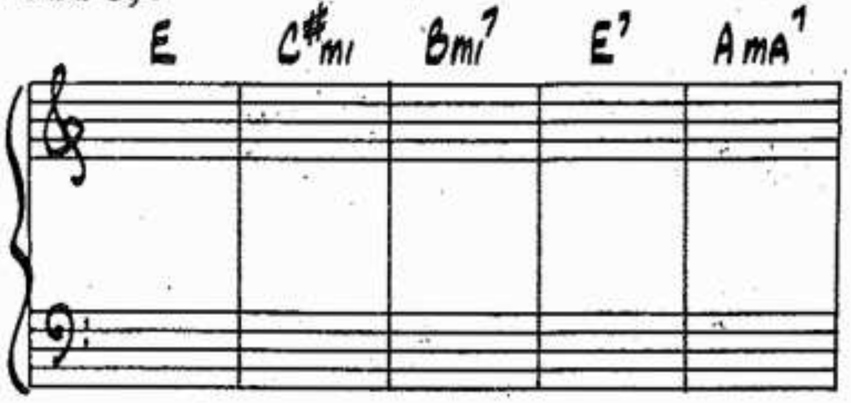
From the generic construction of C minor (from the minor third descending), I've moved as little as possible to the Generic voicing of the F7 from the tonic down. Resolution to the I chord, (B♭Ma9), is obviously easiest when B♭Ma9 is voiced from the 5th descending. We thereby have to move only one voice a half step.

Write and play the other sample voicings to acclimate yourself to the concepts of Generic Voicings and minimal motion between harmonies. Remember: move as little as possible and observe the "Rule of Thumb". Answers on following page.

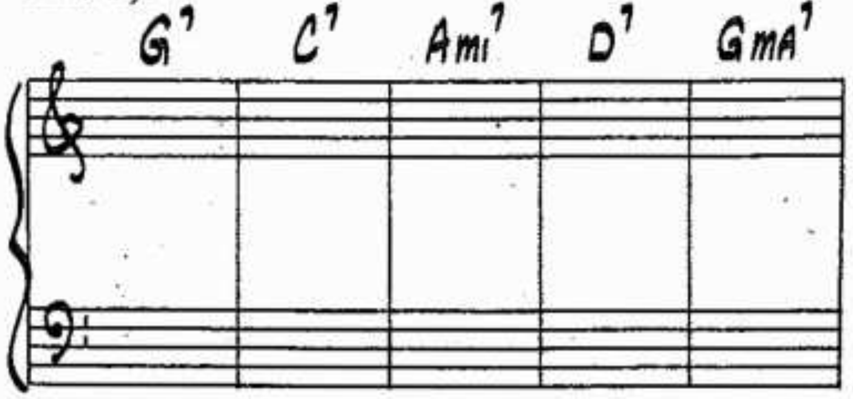
Ex. 3,2



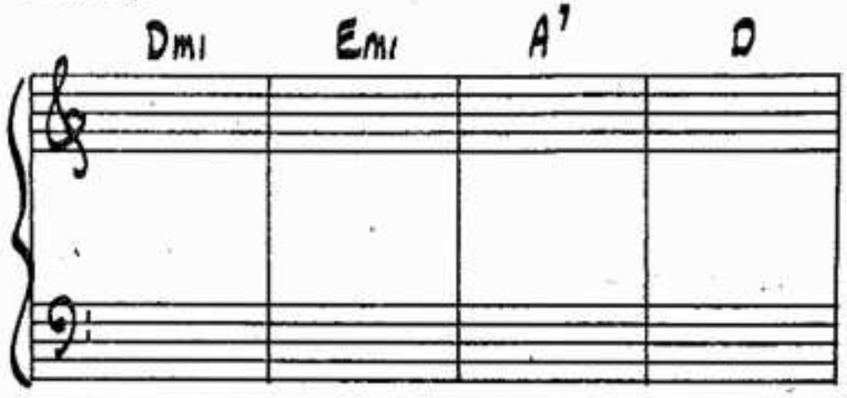
Ex. 3,4



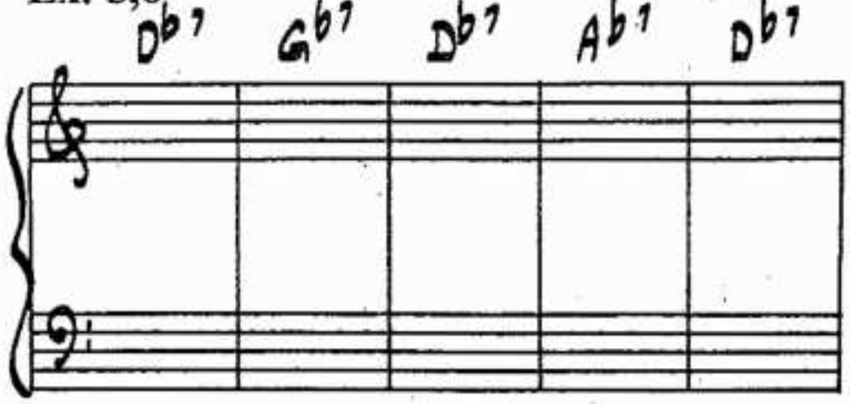
Ex. 3,3



Ex. 3,5



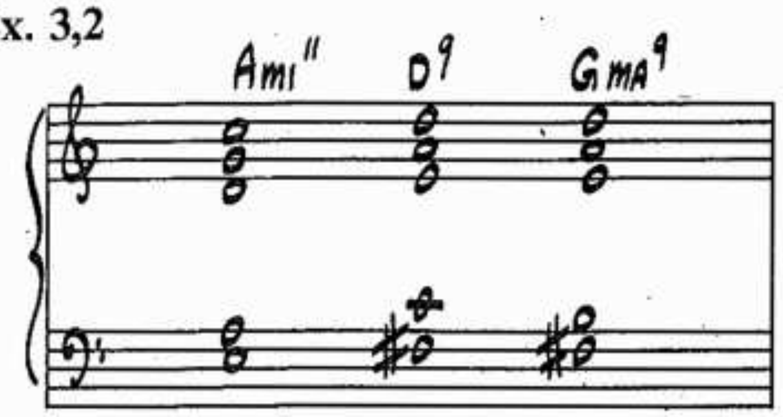
Ex. 3,6



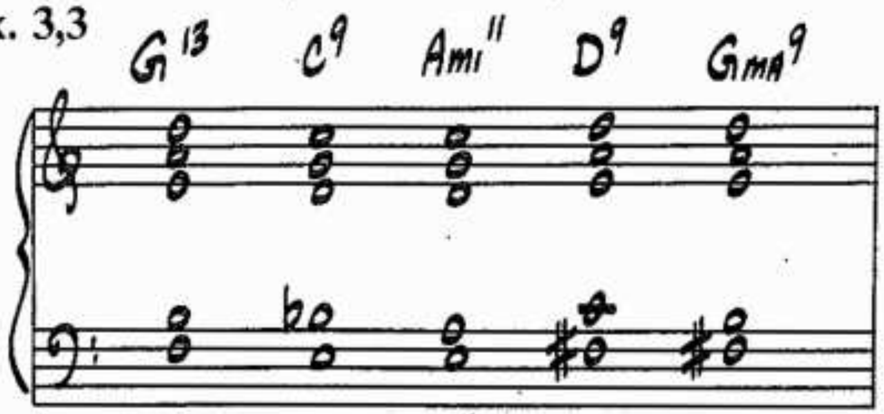
After these progressions have been played, practice Examples. 3,2—3,6 in all 12 keys.

ANSWERS

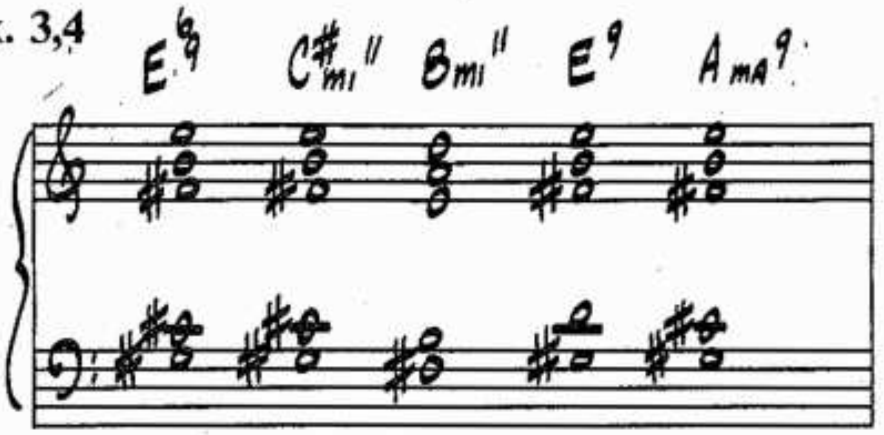
Ex. 3,2



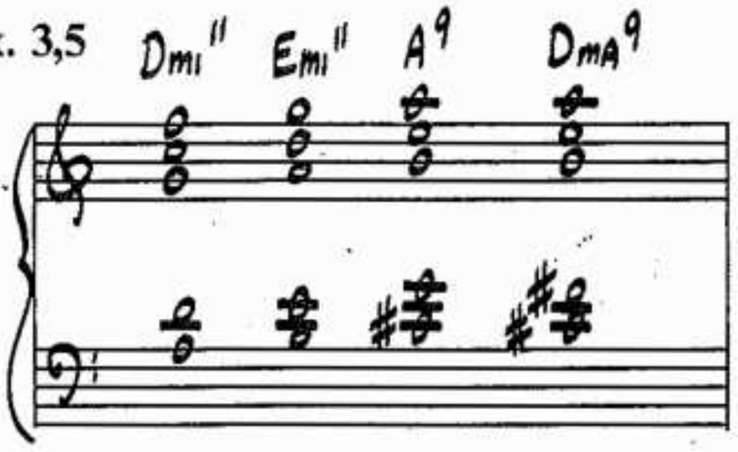
Ex. 3,3



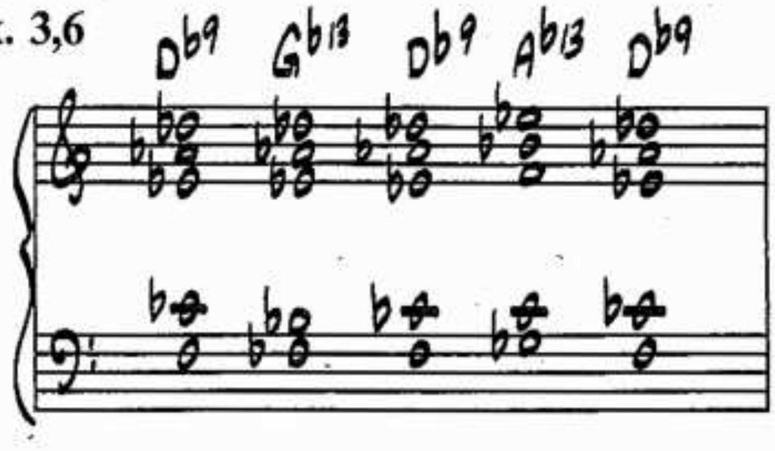
Ex. 3,4



Ex. 3,5



Ex. 3,6



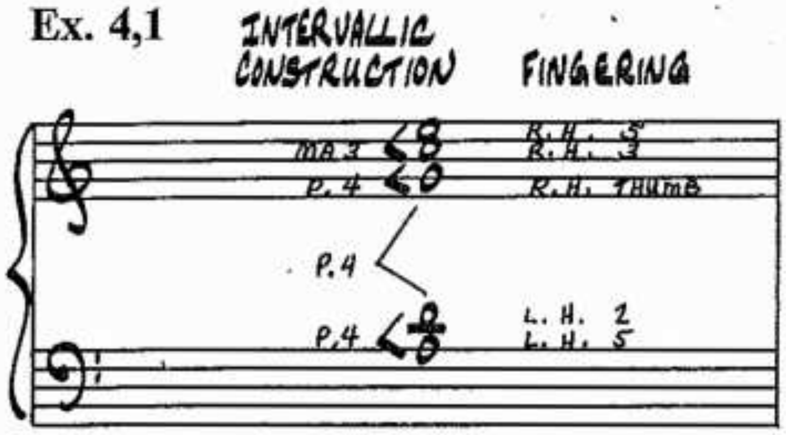
Chapter 4: MIRACLE VOICINGS

You'll find the designation "Miracle Voicing" only in this book. The "miracle" aspect of these voicings is that they each accommodate five different harmonic functions (depending on which tone is used as the tonic), and they help us in our goal of avoiding tertial voicings. Like Generic Voicings, Miracle Voicings are five-note chord constructions.

Miracle Voicing I (M.V.I)

To construct M.V. I, start from any given tone (I've arbitrarily chosen an "E") and descend using the following intervals: Major third, P4th, P4th, P4th.

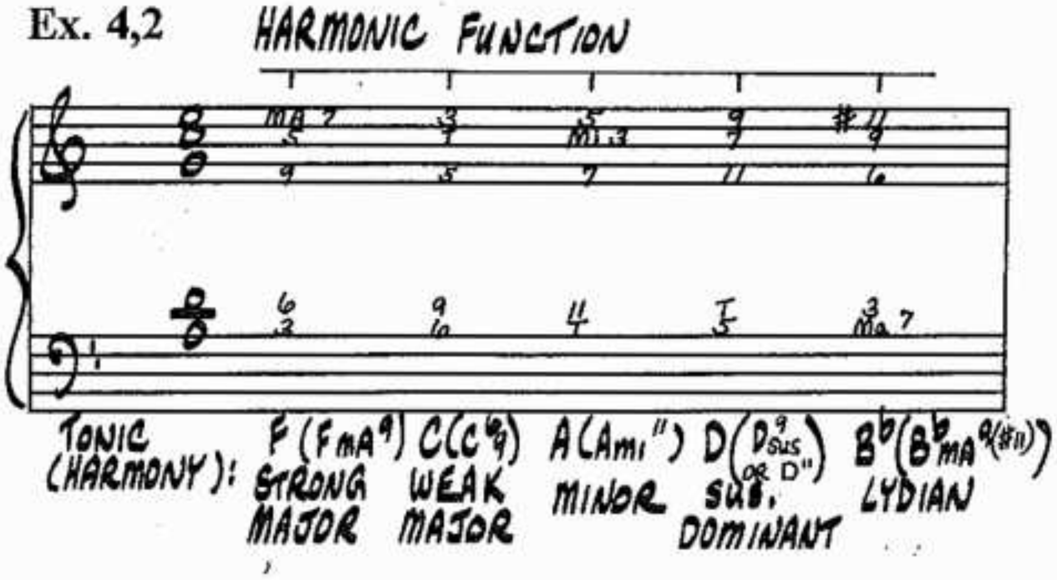
Ex. 4,1



As mentioned, we can use this construction to accommodate five different harmonic functions:

Harmonic functions of Ex. 4,1. (M.V.I)	Tonic
Strong Major (3rd and 7th present)	F
Weak Major (7th not present)	C
Minor	A
Suspended Dominant (11th chord)	D
Lydian	B♭

Ex. 4,2



To locate the tonic to be used for the various harmonic functions, use the following method:

1. The tonic of the strong major function, is ½ step above the top voice. In the case of Ex. 4,1: "F".
2. To find the tonic of the weak major function, use the second voice from the top of the construction as the tonic (root). In this case, "C".
3. The lowest voice in the construction serves as the tonic of the minor function. For Ex. 4,1; "A".
4. To find the tonic of the suspended dominant, or 11th chord function, use the second voice from the bottom.
5. The tonic of the Lydian function is either a tritone from the top voice, or ½ step above the bottom voice. In this case, "B♭".

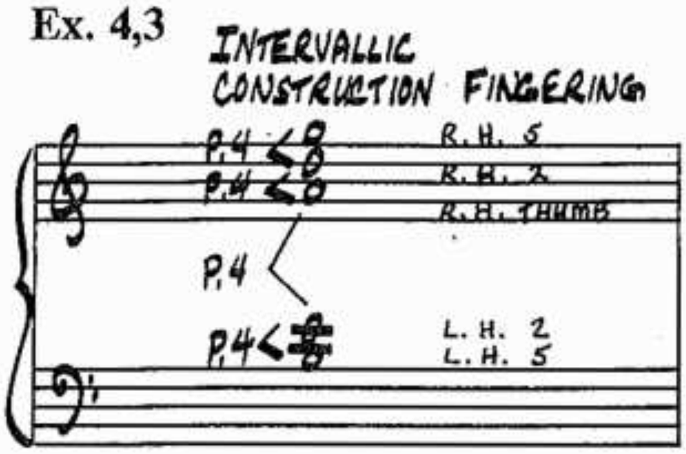
In Lydian harmonies, the ♯4, or ♯11 is the most poignant tone as it is the only scale step which differentiates Major from Lydian.

Miracle Voicing II (M.V.II)

Miracle Voicing II is identical to our old friends, Generic Major and Minor. It is a 5-note construction, built entirely from perfect fourths. Like M.V.I, M.V.II serves five different harmonic functions: 2 Major, 1 Minor, 1 Suspended Dominant, and 1 Lydian.

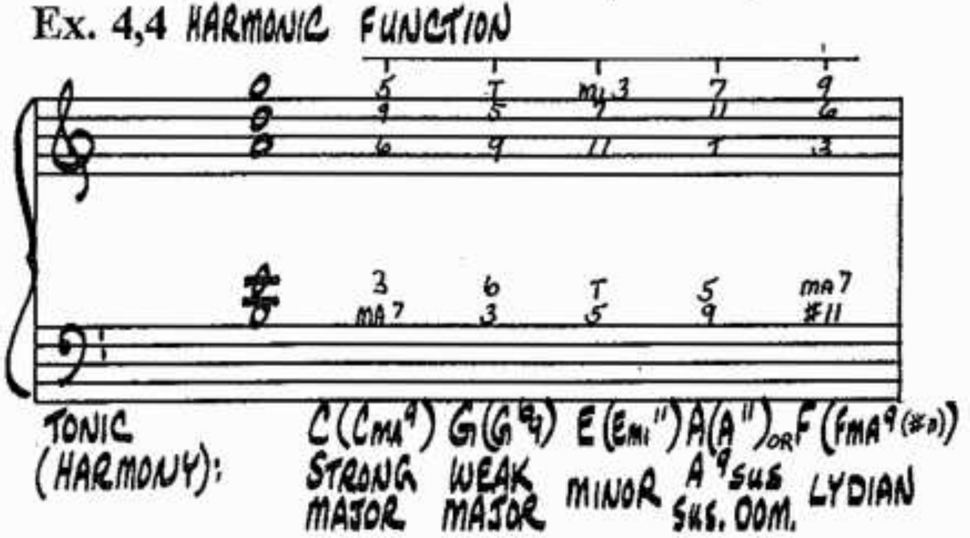
Let's arbitrarily start from a "G" and descend in fourths as follows.

Ex. 4,3



Let's now find the tonics (roots) of the five different harmonic functions.

Ex. 4,4



Harmonic functions of M.V. II.	Tonic
Strong Major (3rd and 7th present)	C
Weak Major (7th not present)	G
Minor	E
Suspended Dominant (11th chord)	A
Lydian	F

To locate the tonic of the 5 various harmonic functions, proceed as follows:

1. The top voice is the root of the weak major function. (Identical to Generic Major from the tonic descending). In this case "G".
2. Since the Generic Major voicing from the 5th descending is also identical to M.V. II, the tonic will be a P.4th above the top voice. In this example, "C". This is the strong major function since both the 3rd and 7th are present.
3. The 2nd voice from the bottom is the tonic of the minor function. In this case, "E". This construction is also identical to the Generic Minor with the minor third scale step as the top voice.
4. The middle voice is the tonic of the 11th chord or suspended dominant function. In this example, "A".
5. The root of the Lydian function is a tri-tone from the bottom voice. In this case, "F".

Note that for M.V. I the tonic of the Lydian function is a tritone from the top voice. Conversely, for M.V. II, the tonic of the Lydian function is a tritone from the bottom voice.

Chapter 4 in a Nutshell:

A. There are two miracle voicings designated as M.V. I and M.V. II. both are five-voice constructions.

B. Miracle Voicing I has a major third between the top two voices. Otherwise it is a quartal construction.

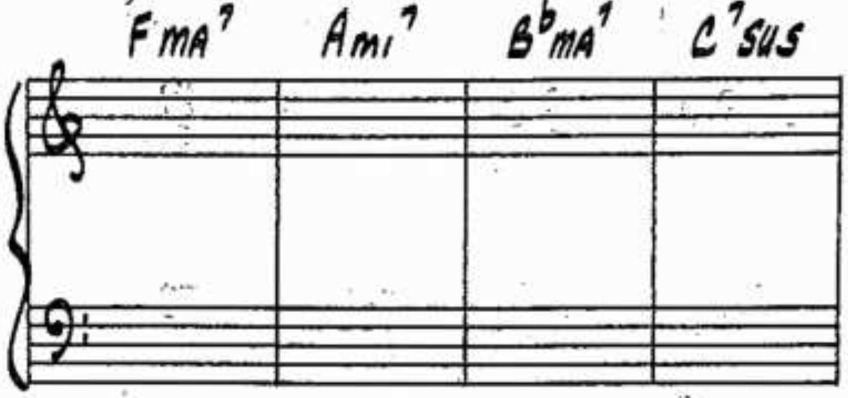
C. M.V. II is constructed entirely of perfect fourths.

D. Each Miracle Voicing serves five different harmonic functions depending on which tone is employed as the tonic.

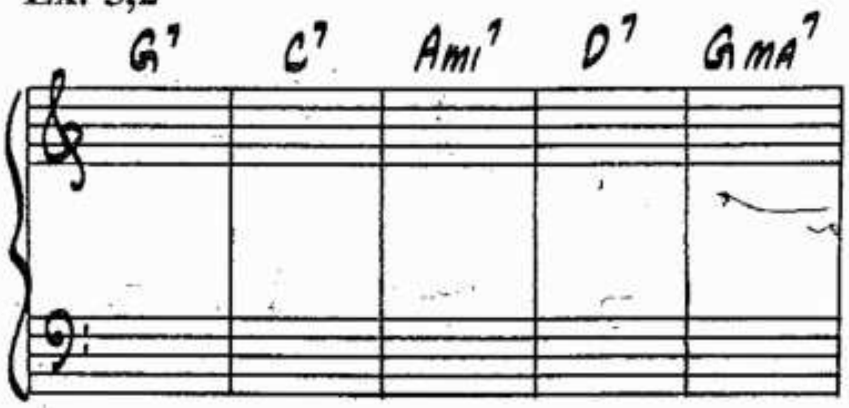
Chapter 5: "WORKOUT" WITH GENERIC AND MIRACLE VOICINGS

Using only Generic Majors, Minors, Dominants, and M.V. I and M.V. II, let's voice some sample progressions bearing in mind the "Rule of Thumb" and minimal motion between adjacent harmonies. Remember that approximations of chord qualities (e.g. CMi11 for a desired CMi7) are permissible as long as there are no chord tones present which are not members of the parent scale/mode of the given harmony.

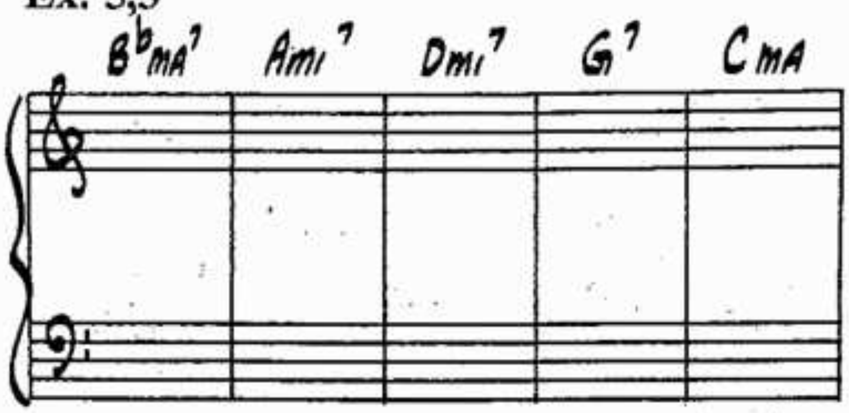
Ex. 5,1



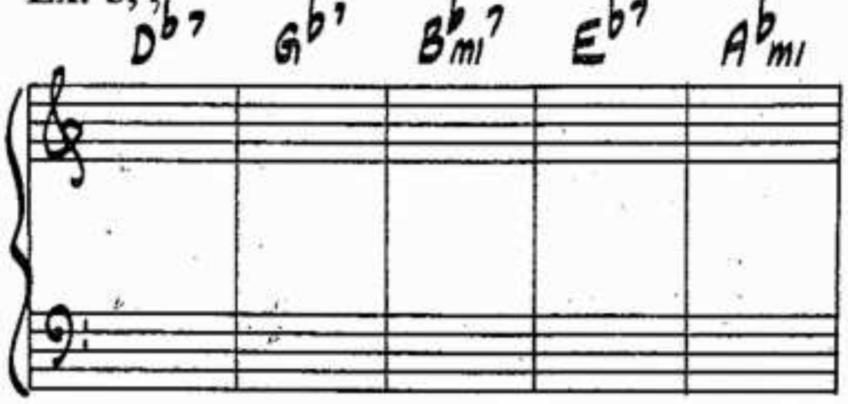
Ex. 5,2



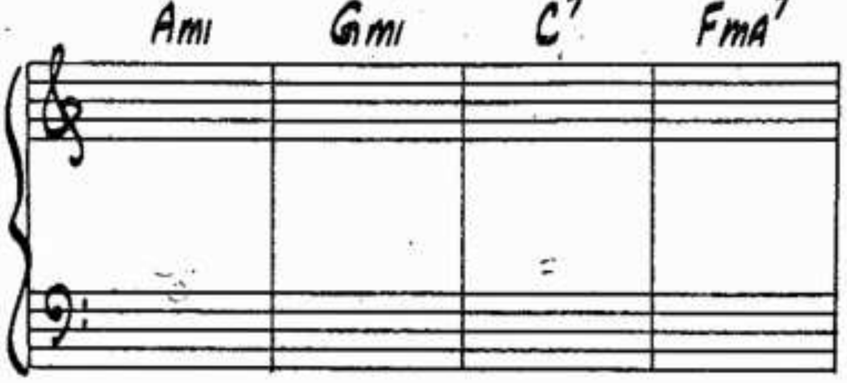
Ex. 5,3



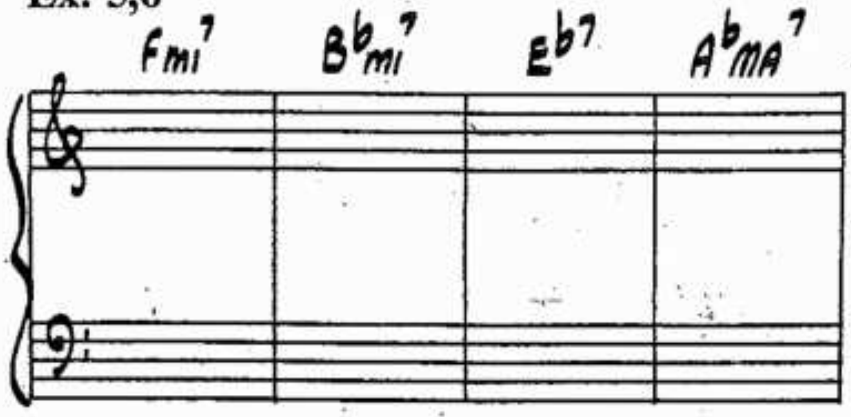
Ex. 5,4



Ex. 5,5



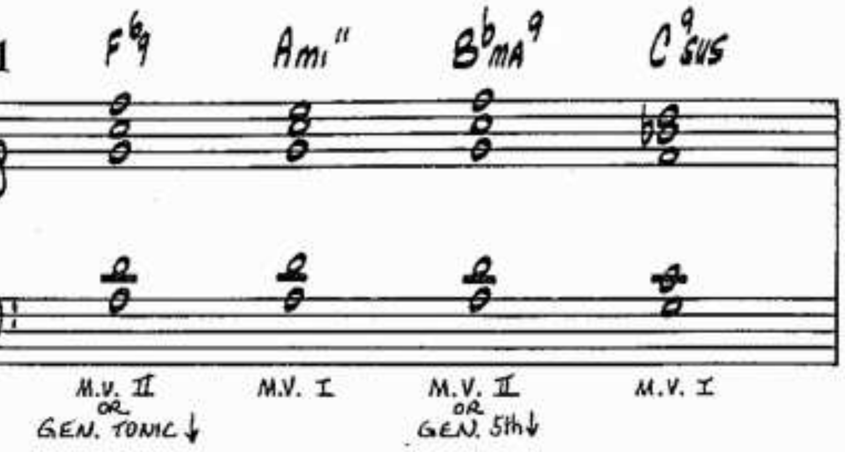
Ex. 5,6



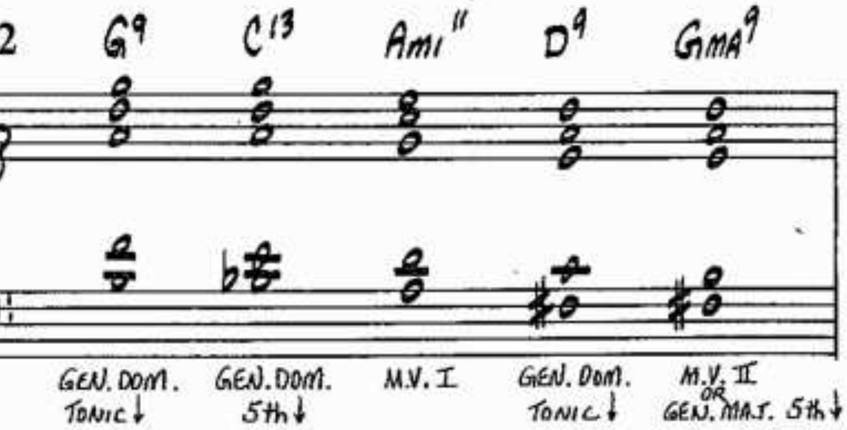
ANSWERS

Analyze the step-wise or intervallic motion of the root movements of each preceding progression and then transpose the progressions to other keys.

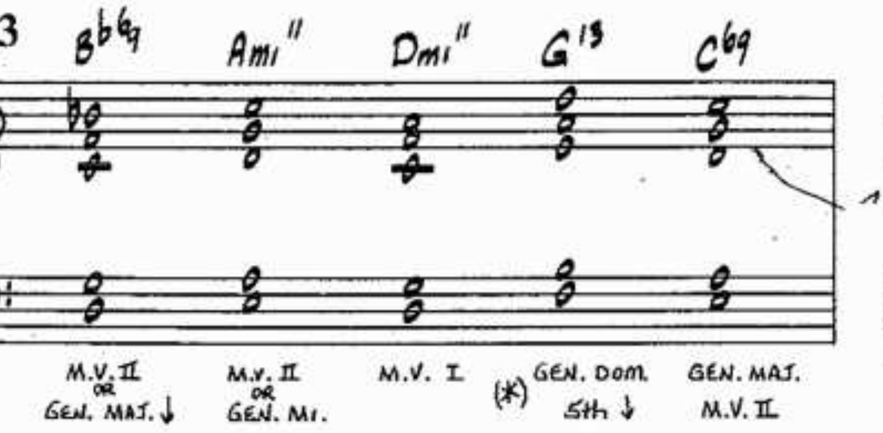
5,1



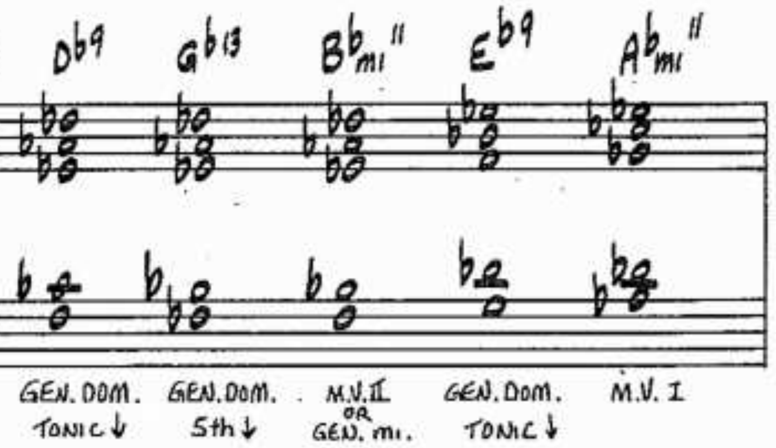
5,2



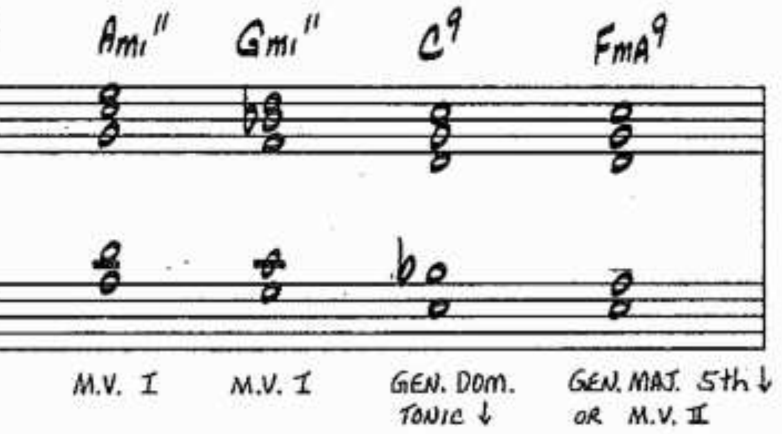
5,3



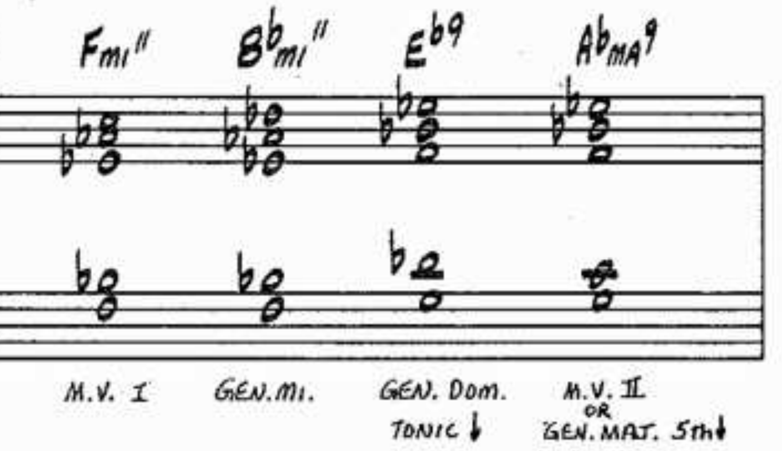
5,4



5,5



5,6



(*) NOTE THE LEAP BETWEEN THE Dmi11 - G13 to OBSERVE THE RULE OF THUMB.

Chapter 6: VOICING SUSPENDED AND ALTERED DOMINANT CHORDS AS POLYCHORD FRACTIONS

Don't be intimidated by the title of this chapter. The concept here is as easy to assimilate as Generic and Miracle Voicings were in the previous chapters. Let's begin by redefining the terms used:

1. Dominant family chords: 7ths, 9ths, and 13ths. (11th chords are unique because in application the third is replaced by the 4th or 11th scale tone).
2. Alterations are diatonic scale tones which are chromatically raised or lowered (altered) to create new sounds or "tensions". Alterations to be covered: ♭5, or ♯11, ♯5 or ♭13, ♭9, ♯9, and possible combinations of altered tones, for ex. (♭9/♭5).
3. To voice these altered dominants we're going to think of two harmonies stacked one on top of the other like a fraction:

$$\frac{\textbf{numerator}}{\textbf{denominator}} = \frac{\mathrm{II}}{17} = \frac{\mathrm{G}}{\mathrm{F7}}$$

General information and explanation of symbols used

1. "x" is any given tonality, e.g., F, B, E♭, etc.
2. The Roman numerals in the fraction refer to the **major** scale steps of the "x" tonality.
3. Tritone indicators for dominant family chords are Ma 3rd and dominant seventh (the interval between these two tones is a tritone) with the exception of 11th chords (suspended dominant chords) where the third is absent. The Ma3rd and dominant 7th are the only mandatory chord tones for the denominator, or bottom half of the polychord fraction.
4. The "numerator" triad on top is always a major triad, and any inversion, i.e. root position, first inversion, or second inversion is equally functional as the "numerator" or top half of the polychord fraction.
5. Only in rare instances may we not take the liberty to consider 7th, 9ths, and 13ths as interchangeable. In other words, when we see a chord symbol designation of a 7th, the ninth or sixth (13th) may be added in performance thereby enhancing, not detracting, from the chord quality.

Let's start with the one exception, the 11th chord (or suspended dominant).

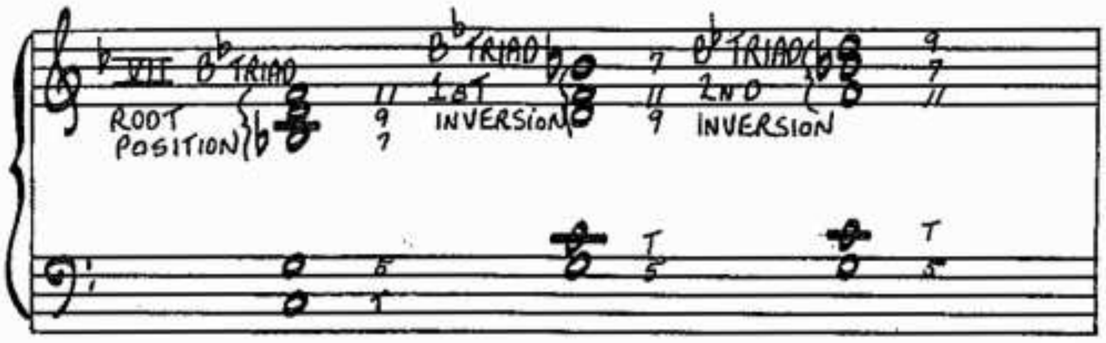
Desired harmony	Fraction	Example	Implementation
I. x11 or x7sus	$\frac{\flat \mathrm{VII}}{\mathrm{I}}$	**C11**	$\frac{\mathrm{B}\flat}{\mathrm{C}}$

This harmony is the one exception for two reasons:

1. It is not an altered harmony. All chord tones are in the Mixolydian diatonic system.
2. The third is not used in application, hence the tritone indicators for the denominator are not applicable.

However, conceptualizing the 11th chord as $\frac{\flat VII}{I}$ instantly gives us the best voicing. In the case of C11, because the third is deleted and the seventh is already present in the numerator triad, the obvious choices for the two representative tones of denominator are the tonic and fifth.

Ex. 6,1 C^{11} OR $C^{9}SUS\left(\frac{\flat VII}{I}\right)$



Note in Ex. VI.1. that all inversions of the major triad based on the ♭VII scale step (B♭) are equally functional. In order to keep all voices as compact as possible, it is sometimes necessary to reverse the tonic and fifth in the left hand. Note that in the 1st and 2nd inversion spellings of Ex. 6,1, the tonic is now above the fifth in the left hand. Wide intervallic "gaps" between the two hands should be avoided in the interest of sonority.

Example 6,2 lists the polychord fractions to be used for other altered dominant chords.

Ex. 6,2 POLYCHORD FRACTIONS FOR ALTERED DOMINANTS:

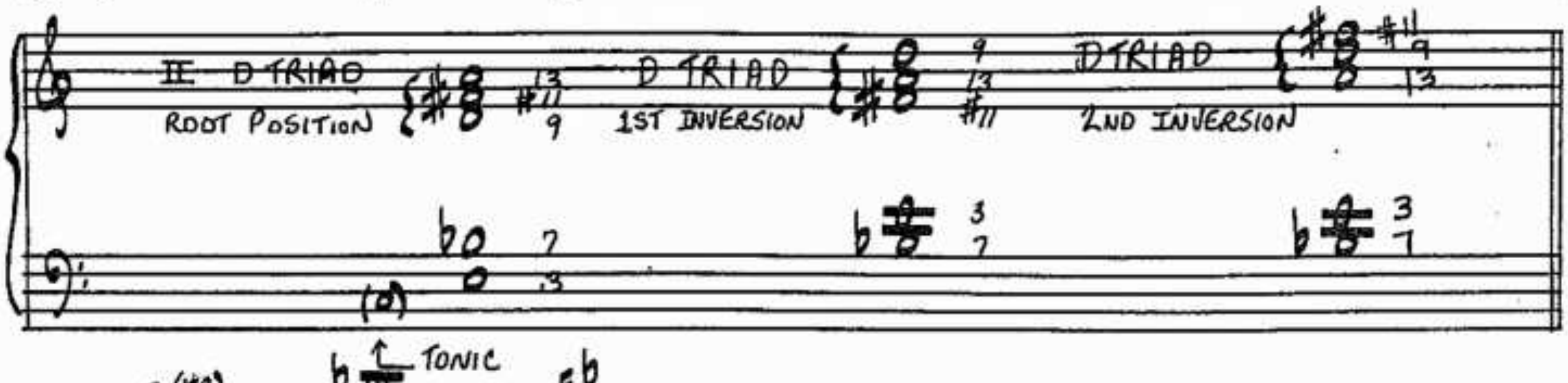
	DESIRED HARMONY	FRACTION	EXAMPLE	IMPLEMENTATION
A.	$X^{7(\flat 5)}$ OR $X^{13(\sharp 11)}$	$\frac{II}{I^{7}}$	$C^{13(\sharp 11)}$	$\frac{D}{C^{7}}$
B.	$X^{7(\sharp 9)}$	$\frac{\flat III}{I}$	$C^{7(\sharp 9)}$	$\frac{E\flat}{C}$
C.	$X^{7}\binom{\flat 9}{\flat 5}$	$\frac{\flat V}{I}$	$C^{7}\binom{\flat 9}{\flat 5}$	$\frac{G\flat}{C}$
D.	$X^{13(\flat 9)}$	$\frac{VI}{I^{7}}$	$C^{13(\flat 9)}$	$\frac{A}{C^{7}}$
E.	$X^{7}\binom{\sharp 9}{\sharp 5}$ OR $X_{+}^{7(\sharp 9)}$	$\frac{\flat VI}{I^{7}}$	$C_{+}^{7(\sharp 9)}$	$\frac{A\flat}{C^{7}}$

"C" has arbitrarily chosen as the x tonality since most of us first learned the C scale and therefore feel at home in "C".

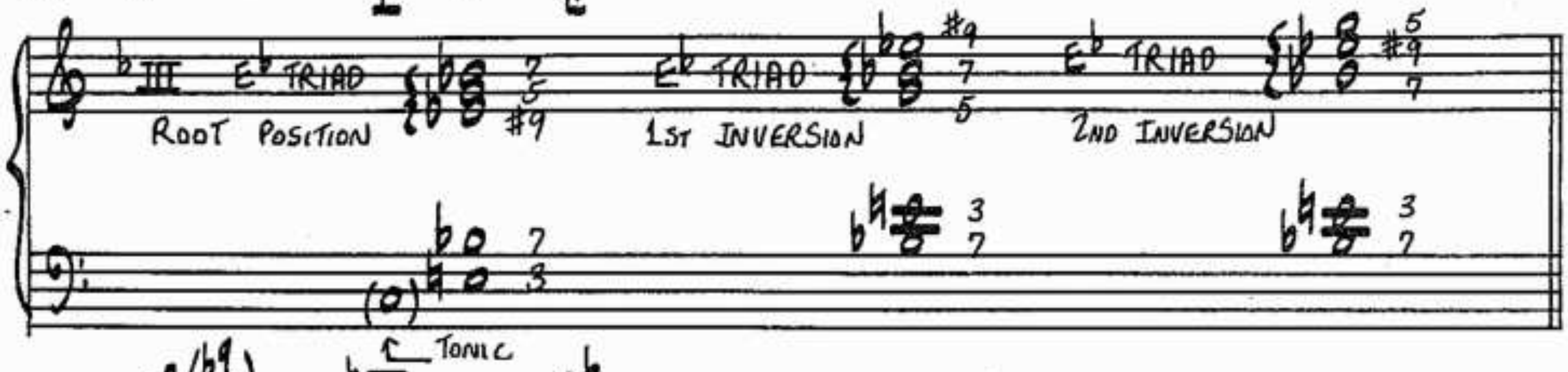
Let's voice the preceding:

Ex. 6,3

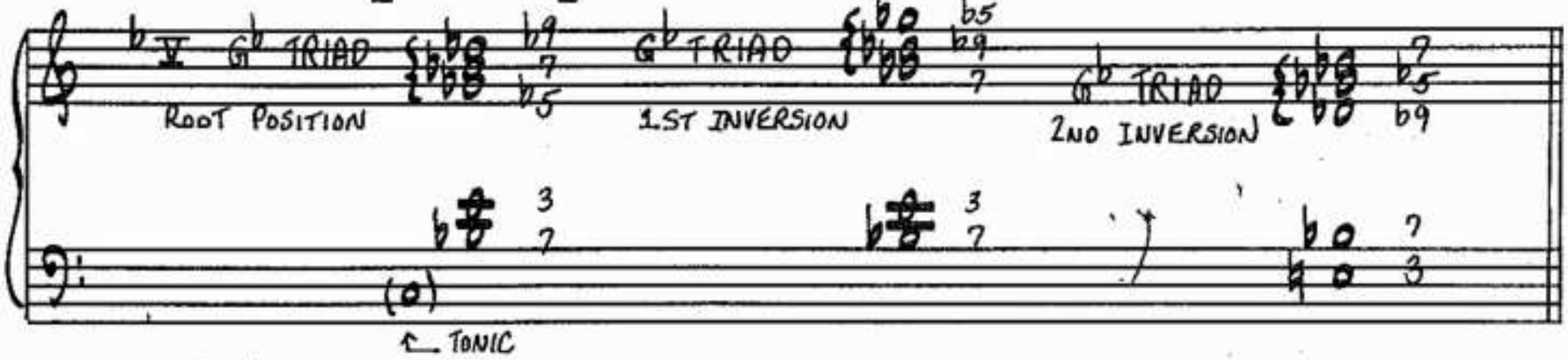
a. $C^{13(\sharp 11)} = \frac{II}{I^7} = \frac{D}{C^7}$



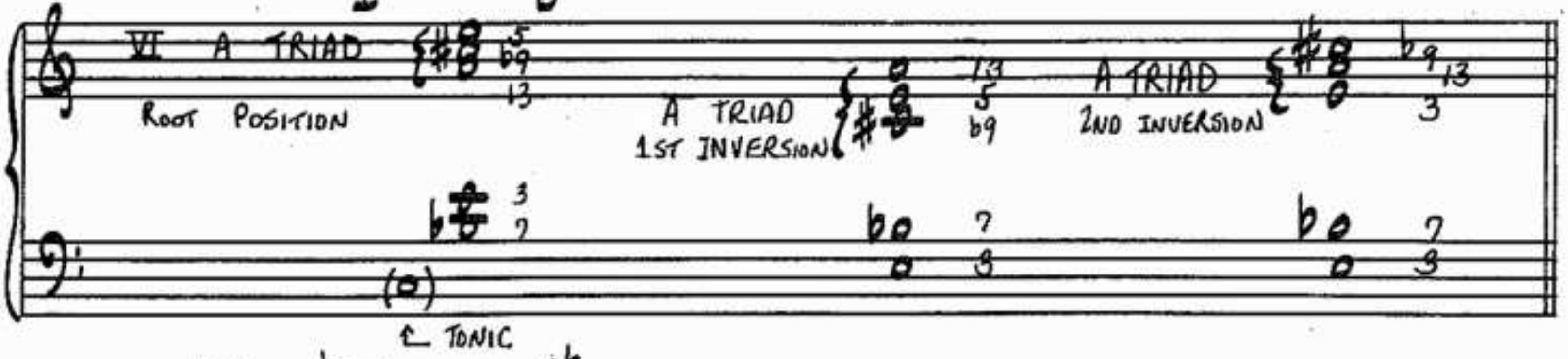
b. $C^{7(\sharp 9)} = \frac{\flat III}{I} = \frac{E\flat}{C}$



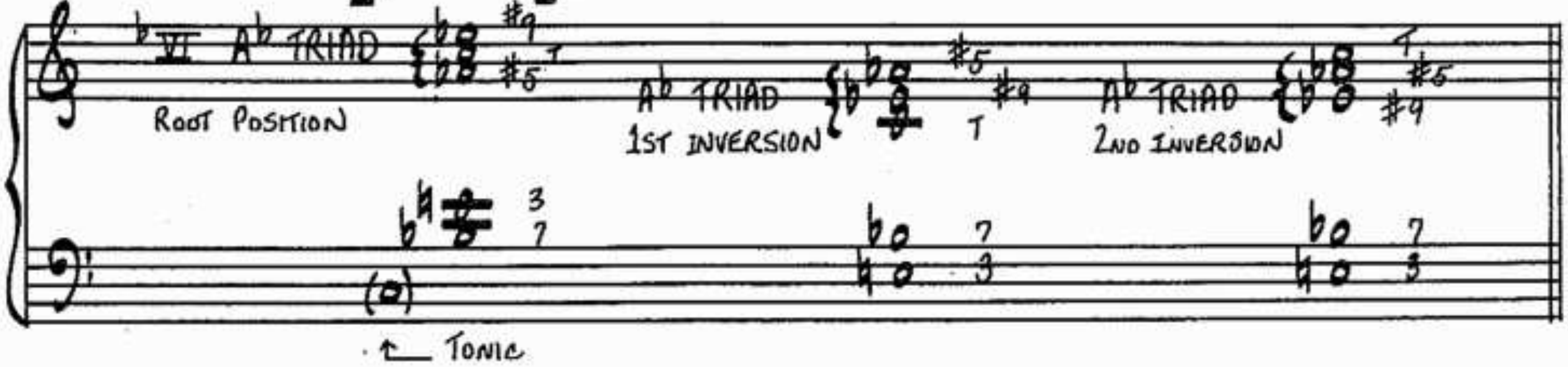
c. $C^{7\left(\substack{\flat 9\\ \flat 5}\right)} = \frac{\flat V}{I} = \frac{G\flat}{C}$



d. $C^{13(\flat 9)} = \frac{VI}{I^7} = \frac{A}{C^7}$



e. $C_{+}^{7(\sharp 9)} = \frac{\flat VI}{I^7} = \frac{A\flat}{C^7}$



Why Polychord Fractions?

Two Answers:

1. By using this method of voicing, we instantly have a guaranteed state of the art sounding 5-note construction for the desired harmony.
2. Expendable chord tones are hereby deleted.

Memorize the 6 polychord fractions and review them until the association between the fraction and the desired harmony are automatic. For example, the (♯11) alteration should ultimately trigger a mental response of $\frac{II}{I7}$.

In recapitulation, remember:

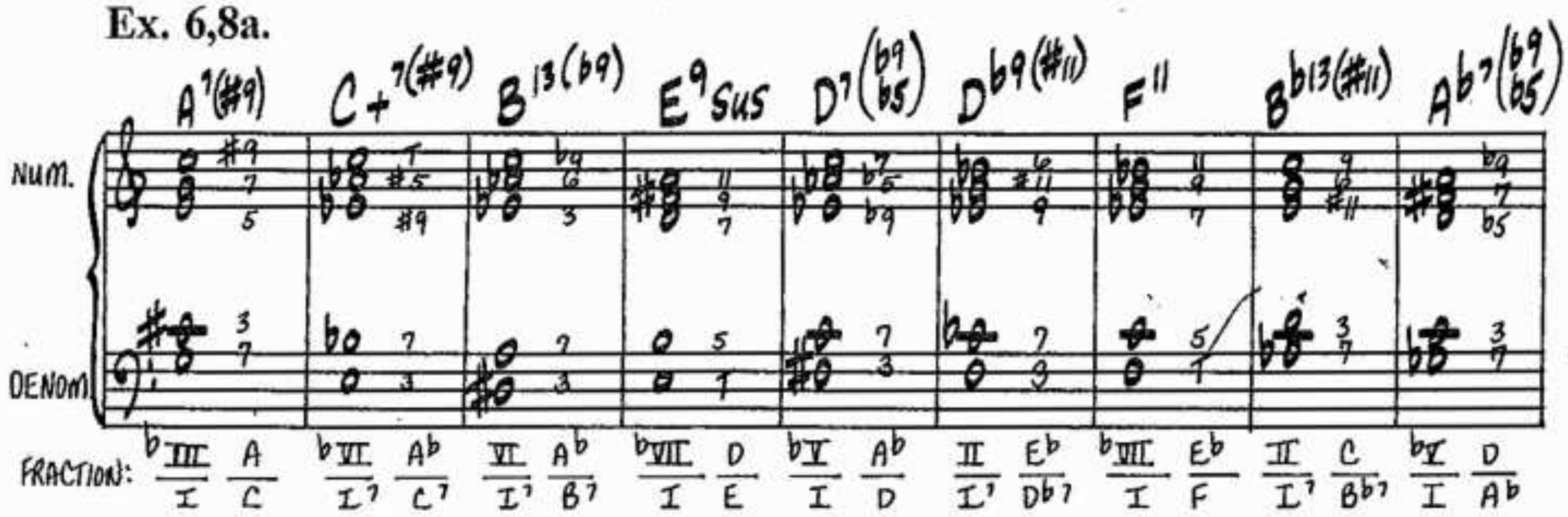
1. Suspended dominant chords are not altered dominants; however, the polychord fraction concept of $\frac{\flat VII}{I}$ not only works, but offers a palatable solution. Root and fifth serve for the L.H. denominator.
2. Tritone indicators (3rd and 7th) may function for all altered dominants as the representative tones for the left hand (denominator). However, should the third or seventh be present in the numerator triad, the tonic may replace the doubled tone in the left hand (denominator).

Paying heed to the "Rule of Thumb" and the concept of "minimal motion", voice the following progressions. Because root position, first inversion, and second inversion triads could feasibly place the right hand thumb within the confines of middle C to C1, only one answer will be offered. If you've moved as little as possible and adhered to the "Rule of Thumb", your voicings are equally correct.

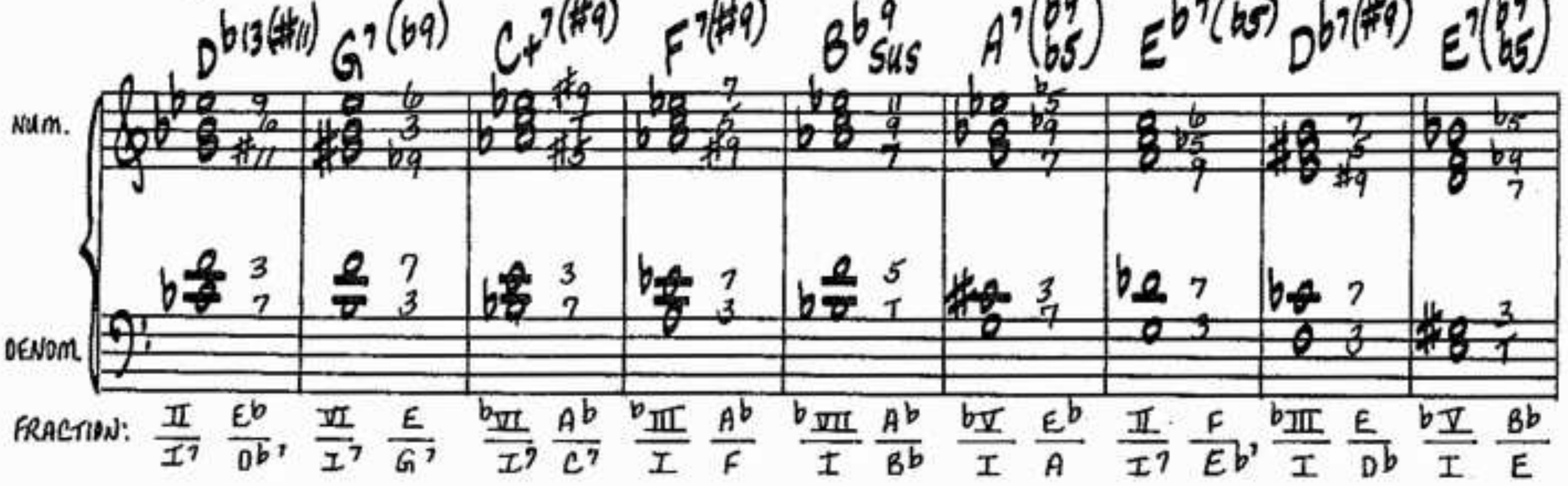
Random suspended and altered dominants.

6,8a. A7(♯9), C7+(♯9), B13(♭9), E9sus, D7(♭9/♭5), D♭9(♯11), F11, B♭13(♯11), A♭7(♭9/♭5)
6,8b. D13(♯11), G7(♭9), C+ 7(♯9), F7(♯9), B♭9sus, A7(♭9/♭5), E♭7(♭5), D♭7(♯ 9), E7(♭9/♭5)

Ex. 6,8a.



Ex. 6,8b.



When the "Rule of Thumb" has been broken by placing the R.H. thumb lower than Middle C, or when a R.H. tone is doubled in the left, it's advisable to substitute the tonic for the lowest voice. The last measure of 6,8b demonstrates this principle.

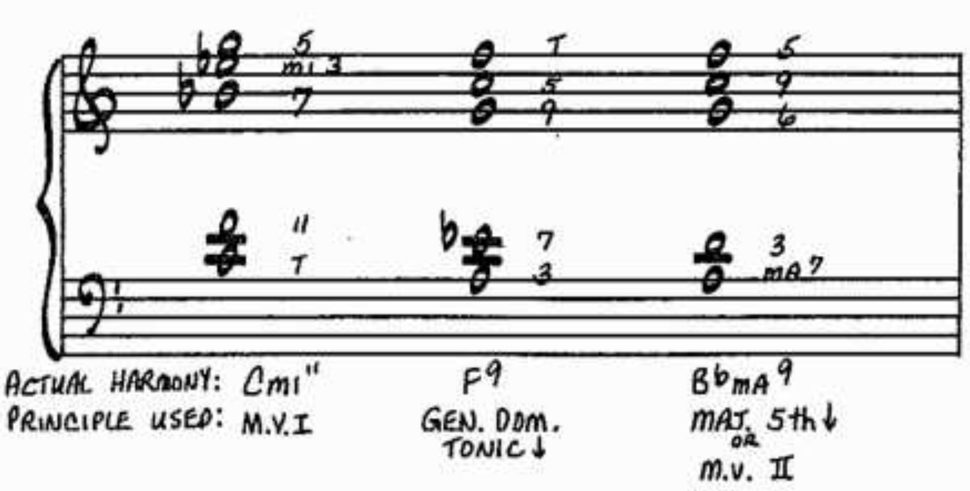
Chapter 7: APPLICATION OF POLYCHORD FRACTIONS IN THE ii7-V7-I PROGRESSION

With the addition of Polychord Fractions as altered/suspended Dominants to our harmonic vocabulary, we are now capable of voicing familiar progressions with some degree of sophistication.

With voicings we've learned in this book, let's now play II-V-I's using various alterations for the dominant V7.

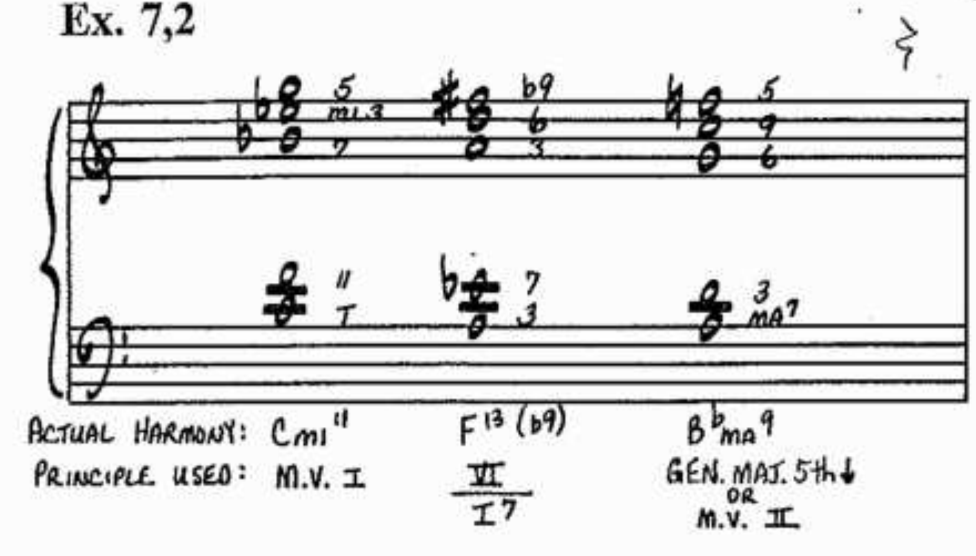
As before, the voicings will be 5-note constructions, which adhere to the "Rule of Thumb" and the principle of minimal motion.

Ex. 7,1 ii^7 - V^7 - I IN B♭



Ex. 7,1 shows generic and miracle voicings employed for a ii7-V7-I in B♭. Let's alter the dominant V7 to include the alteration (♭9). The fraction is $\frac{\text{VI}}{\text{I7}}$, or in this case F13(♭9).

Ex. 7,2

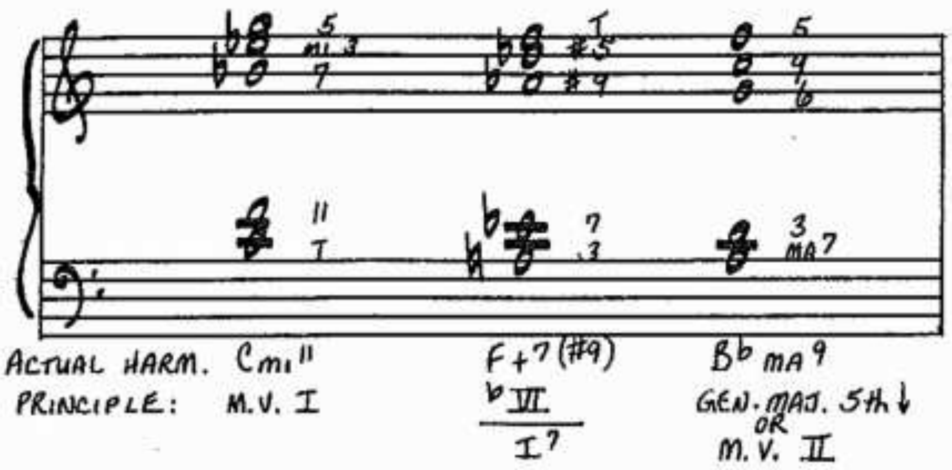


By playing Ex. 7,2, we notice a couple of new favorable tonal bonuses:

1. The voice leading of the soprano voice has more sense of motion and resolution than in Ex. 7,1 due to the descending chromaticism of the line. (This topic of the melodic soprano voice leading will be addressed later in Chapter 11.)
2. The descending parallel triads in second inversion in the right hand create a smooth aural effect, and resolution from the altered V7 to the I sounds more convincing than in Ex. 7,1 because there is more tension in the alteration and no tones common to both harmonies. Hence, the resolution is simply more "resolute".

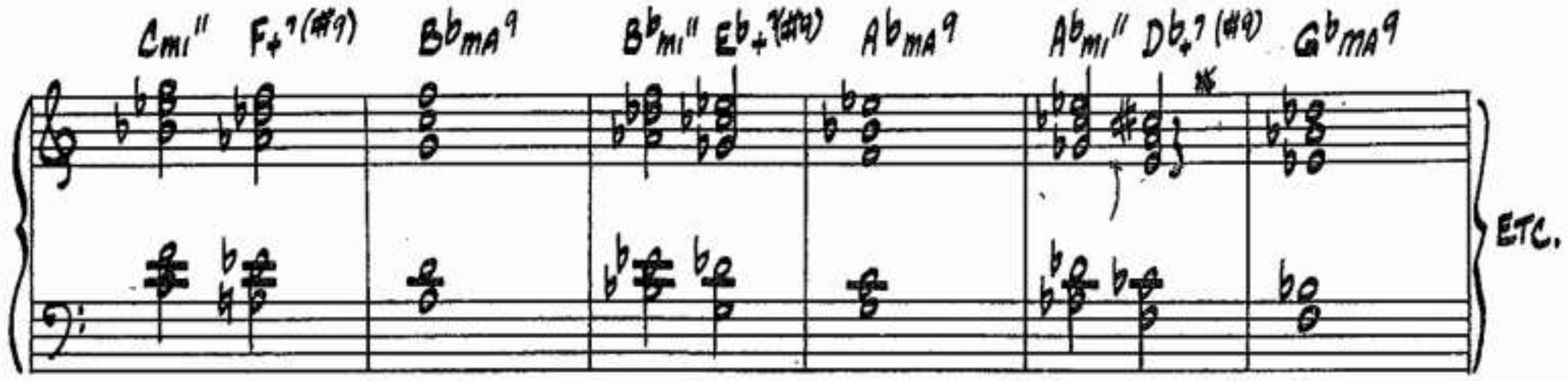
Let's try a ii-V7-I with another dominant alteration (♯9/♯5). Our polychord fraction for this alteration is $\frac{\flat VI}{I7}$.

Ex. 7,8



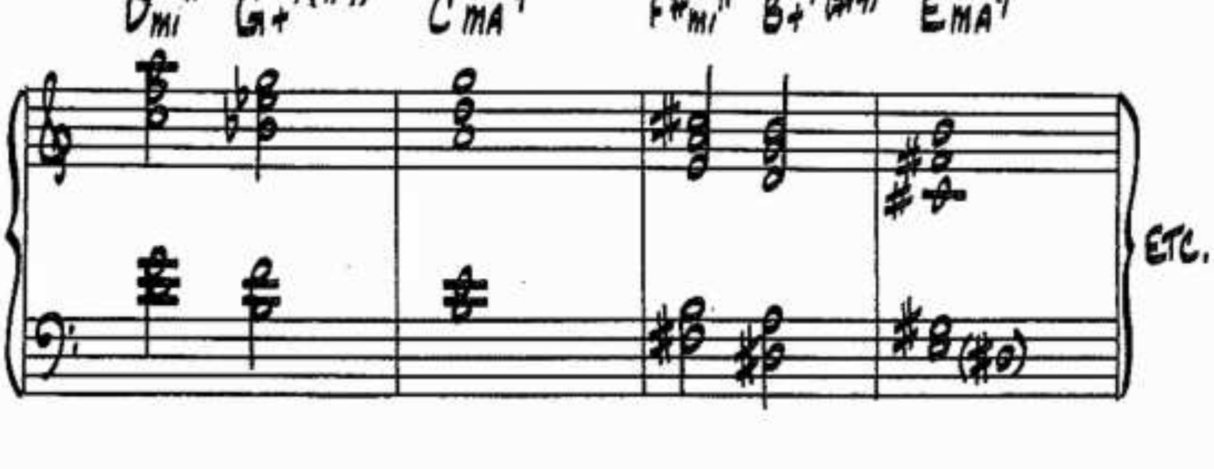
Practice this progression until it is "ingrained". Utilize both a cyclical key sequence (Ex. 7,9) for motor memory, and a random key sequence (Ex. 7,10) for the theoretical assimilation.

Ex. 7,9 PRACTICE ii7-V(♯9/♯5) - I IN B♭, A♭, G♭, E, D, C ; B, A, G, F, E♭, D♭.



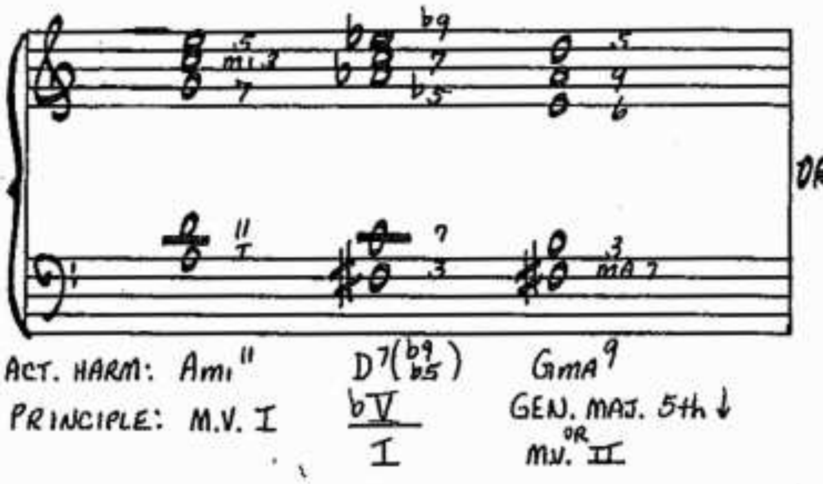
(*) PRACTICE THE PRECEDING PROGRESSION OVER THE RANDOM KEY SEQUENCE: C, E, A♭, B, D, F, A, D♭, E♭, F♯, B♭, G.

Ex. 7,10



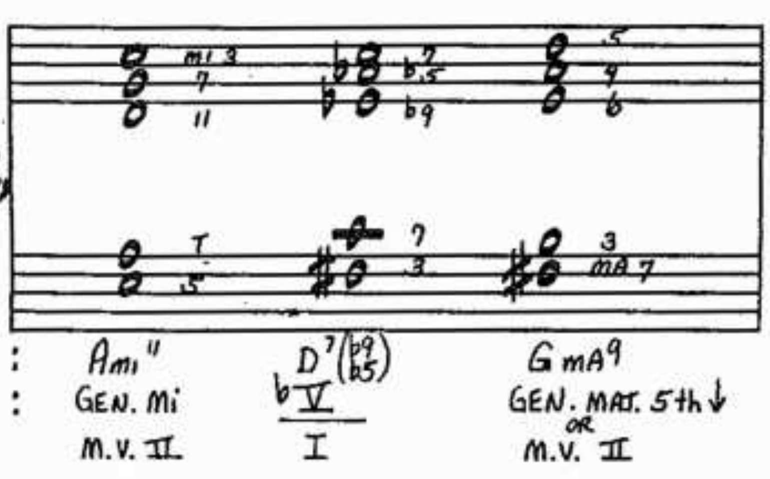
The dominant alteration (♭9/♭5) which is accommodated by the polychord fraction $\frac{\flat V}{I}$ is equally as functional in a ii7-V7-I progression.

Ex. 7,11a ii^7-$V^7(^{\flat 9}_{\flat 5})$-I in "G"



OR,

Ex. 7,11b



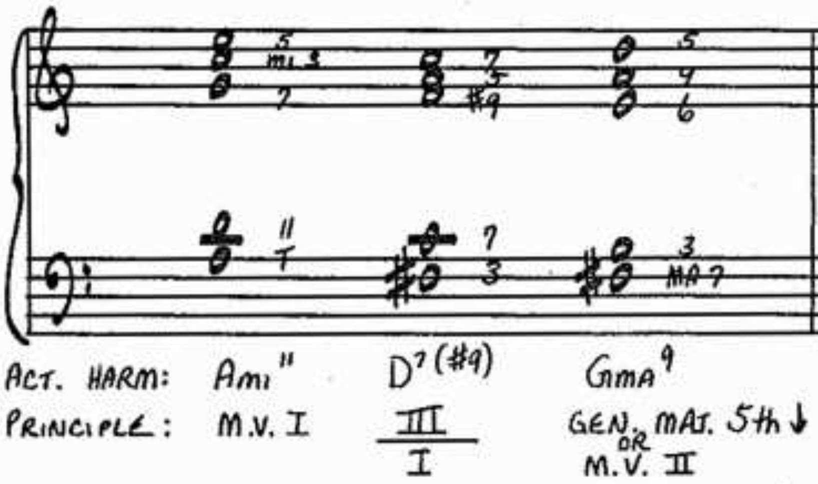
Practice Examples 7,11a and b like the previous examples in this chapter; both over a cyclical and random key sequence.

Cyclical: ii7 - V7(♭9/♭5) – I in the following keys: G, F, E♭, D♭, B, A, A♭, G♭, E, D, C, B♭

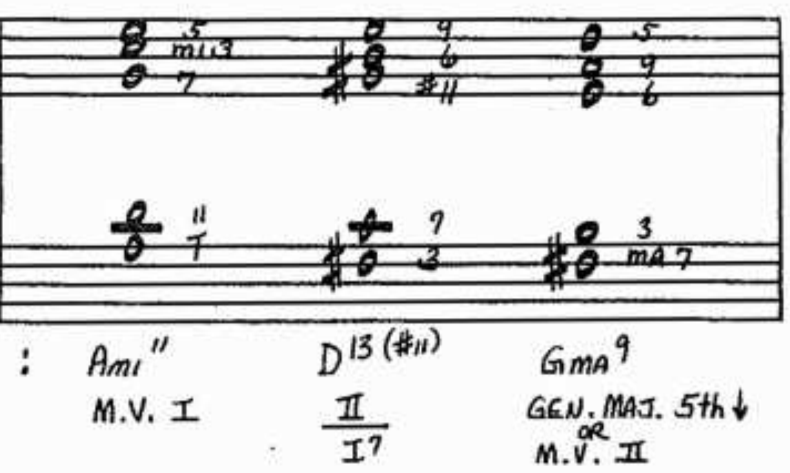
Random: Invent your own sequence, or use that of Ex. 7,10.

The dominant alterations (♯9) and (♯11) could be used in a ii7-V7-I progression as examples 7,12 and 7,13 demonstrate.

Ex. 7,12 ii^7-$V^{7(\sharp 9)}$-I in "G"



Ex. 7,13 ii^7-$V^{13(\sharp 11)}$-I in "G"



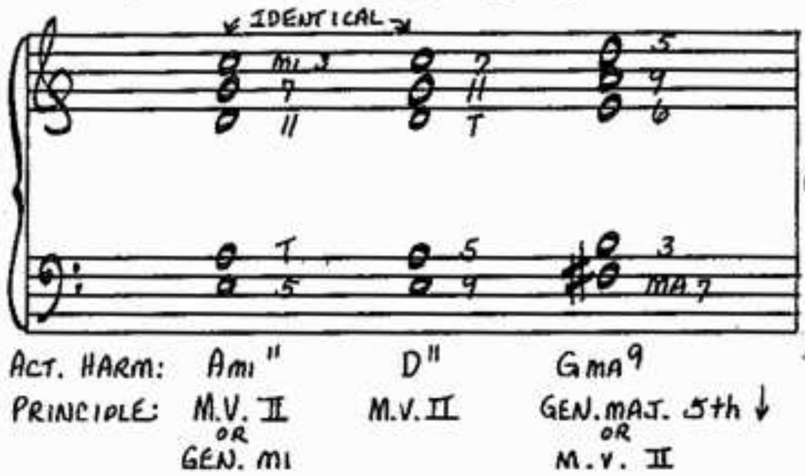
The dominant alterations of (♯9) and (♯11) are, however, different from the other alterations in as much as their tonal properties do not require resolution. In other words, the dominant (♯9) and dominant (♯11) are (to borrow a baseball analogy) free agents. By the nature of their sonority, they do not require resolution to a tonic, but rather, are self-sufficient harmonies that may function in a tonic capacity themselves. For example, the first chord in Coltrane's **Blue Trane** is the tonic E♭7 with the alteration (♯9).

Similarly, the suspended dominant or 11th chord is also harmonically independent, and its tonal properties (tensions) do not require a resolution. The negation of this V-I dominant-tonic relationship is evident in the jazz standard **Maiden Voyage** by Herbie Hancock.

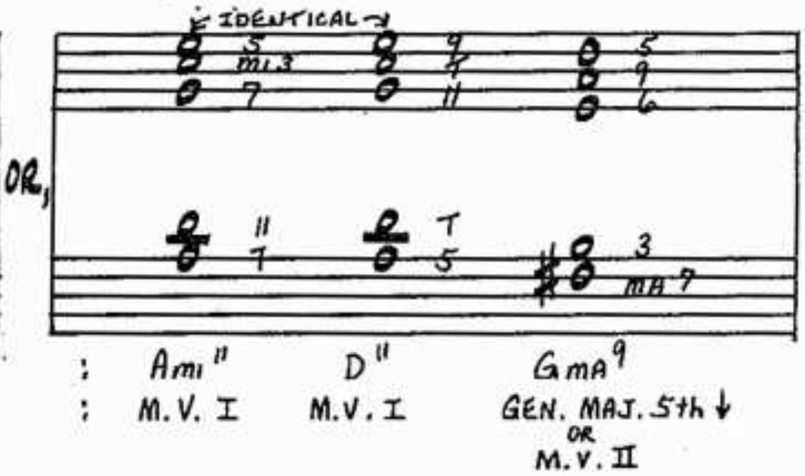
In the A section, 4 bars of D9sus are followed by four bars of F9sus. The root movement is obviously not cyclical (V - I), but rather, I - ♭III. The B section begins with a harmony of E♭sus followed by D♭mi11. Again, we don't have a cyclical V - I root relationship, and the "free agent" status of the suspended dominant (11th) chord has been validated.

Another point of interest concerning the suspended dominant chord: the voicing will be identical to that of ii7 voicing in a ii-V7-I progression.

Ex. 7,14a ii7 - V7sus - I in "G"



Ex. 7,14b



If the principle of minimal motion between adjacent harmonies is observed as in the above examples, the same chord spelling serves two functions, the minor ii, and the suspended dominant V. The bass player would supply the different tonics.

In Summation:

1. Acquaint yourself with the various polychord fractions for the altered and suspended dominants. Devise a method to drill yourself on these fractions until they are automatic.

2. Practice repeatedly the ii7-V7-I progressions shown in this chapter. You will cross paths with ii-V7-I's every day of your musical lives unless you choose to pursue a career of atonal or serial performance. If this be the case, good luck.

3. Remember because of the "tensions" which aurally suggest a resolution, the best alterations for the dominant in the ii7-V7-I progression are:

   a. ♭9 Polychord fractions $\frac{VI}{I7}$

   b. ♭9/♭5 Polychord fraction $\frac{\flat V}{I}$

   c. ♯9/♯5 Polychord fraction $\frac{\flat VI}{I7}$

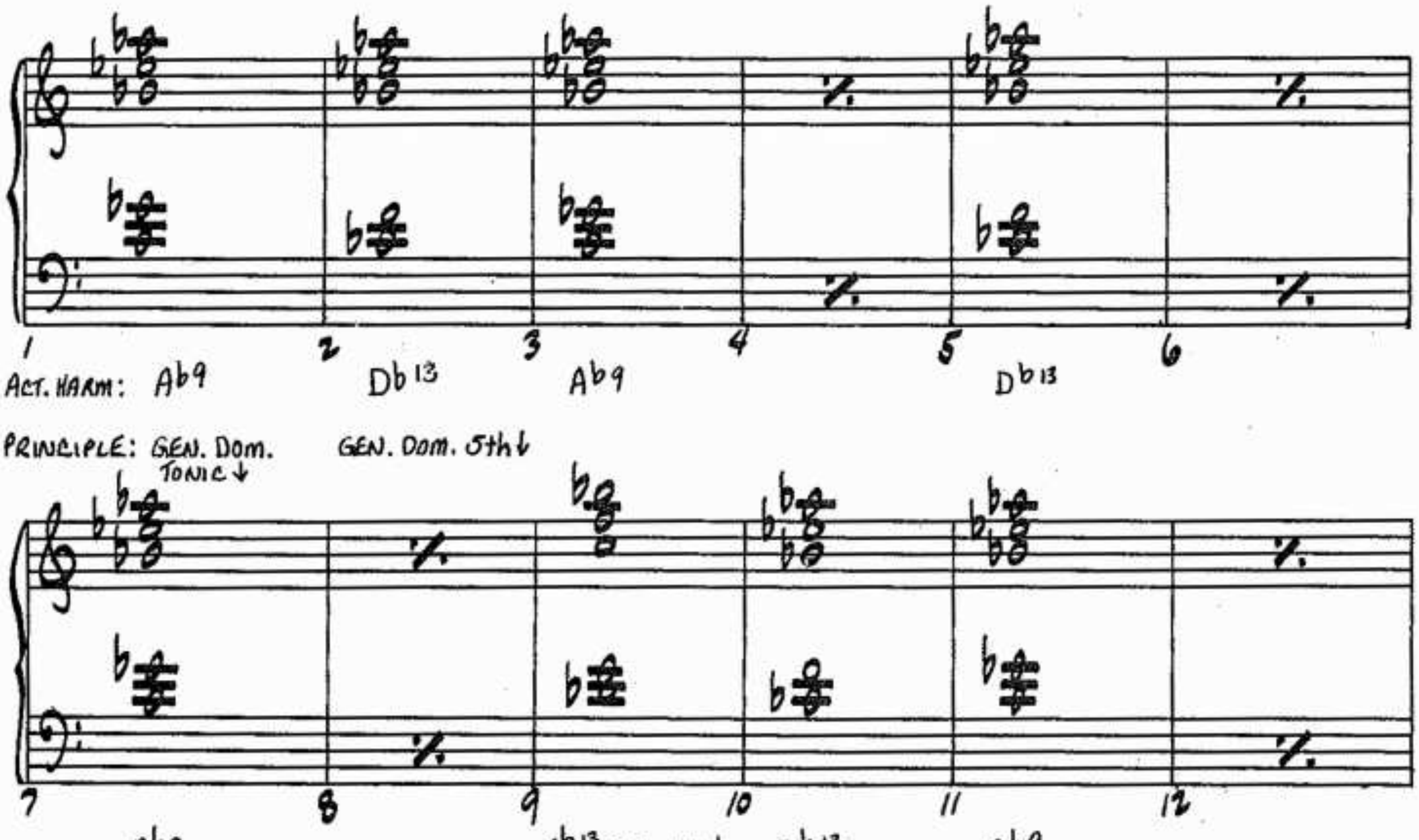
The other alterations, ♯9 ($\frac{\flat III}{I}$) and ♯11 ($\frac{II}{I7}$) as well as the suspended dominant ($\frac{\flat VII}{I}$) may be used. However, the aural sense of tension/resolution between the dominant and the tonic is not as apparent as in the cases of the aforementioned.

Chapter 8: VOICINGS FOR THE BLUES AND OTHER COMMON PROGRESSIONS

Let's now use combinations of Generic Voicings, Miracle Voicings, and Polychord Fractions to voice various blues progressions. We can play the basic blues in "A♭" (three chord progression) with only generic dominants.

Please note that some rhythmic ingenuity must be employed by the jazz pianist with the suggested voicings, rather than simply playing each voicing religiously in each bar on beat one. Comping repeatedly on beat one is one of those unwritten cardinal sins and is guaranteed to annoy your colleagues on the band stand. Listen to the respected masters of the art of comping, e.g. Wynton Kelly, Red Garland, Kenny Drew, Herbie Hancock, to mention a few, in order to familiarize yourself with styllistically correct comping.

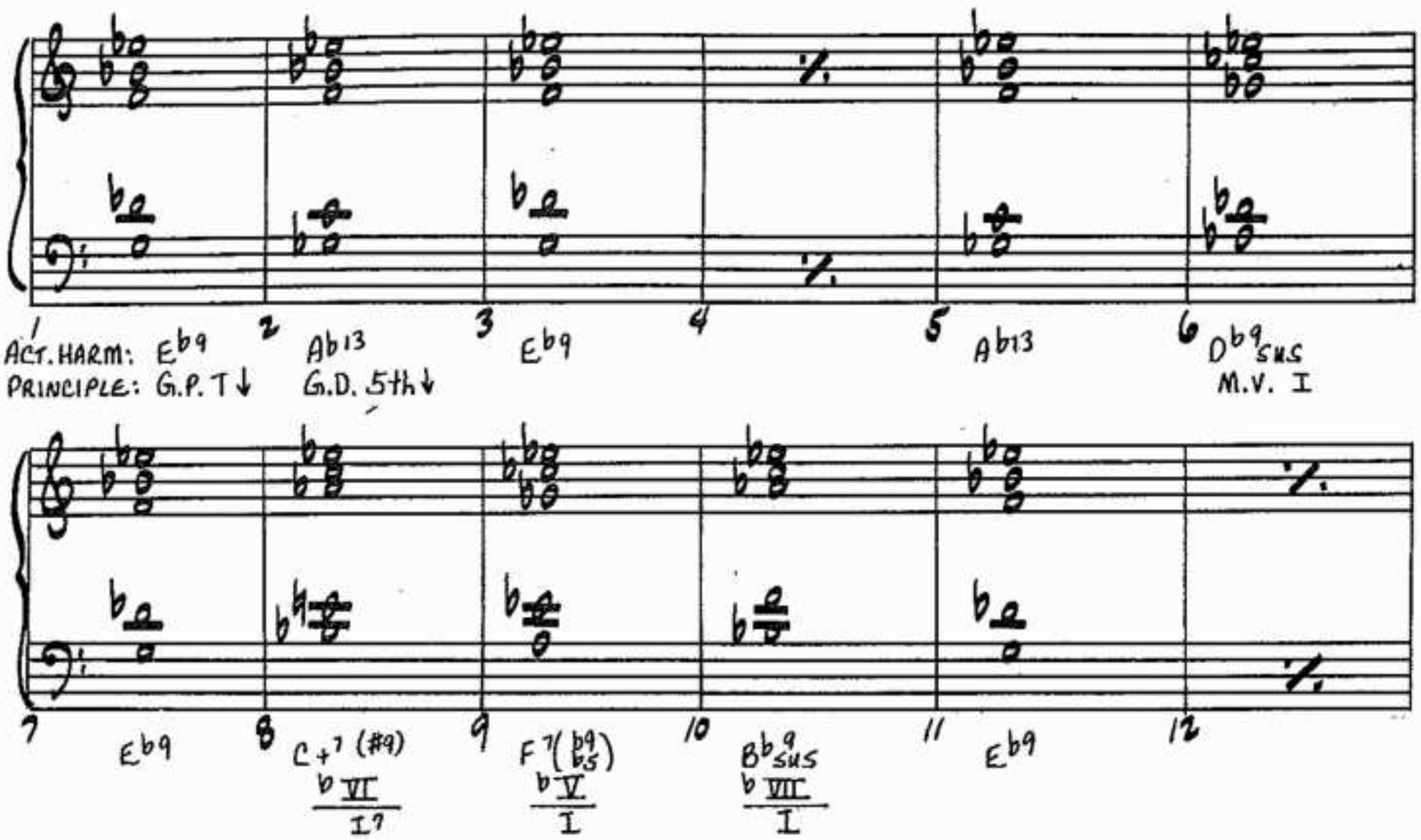
Ex. 8,1



Practice Ex. 8,1 and all subsequent exercises in all twelve keys.

Ex. 8,2 is a blues progression in E♭ with more variety than the basic three chord version shown in Ex. 8,1.

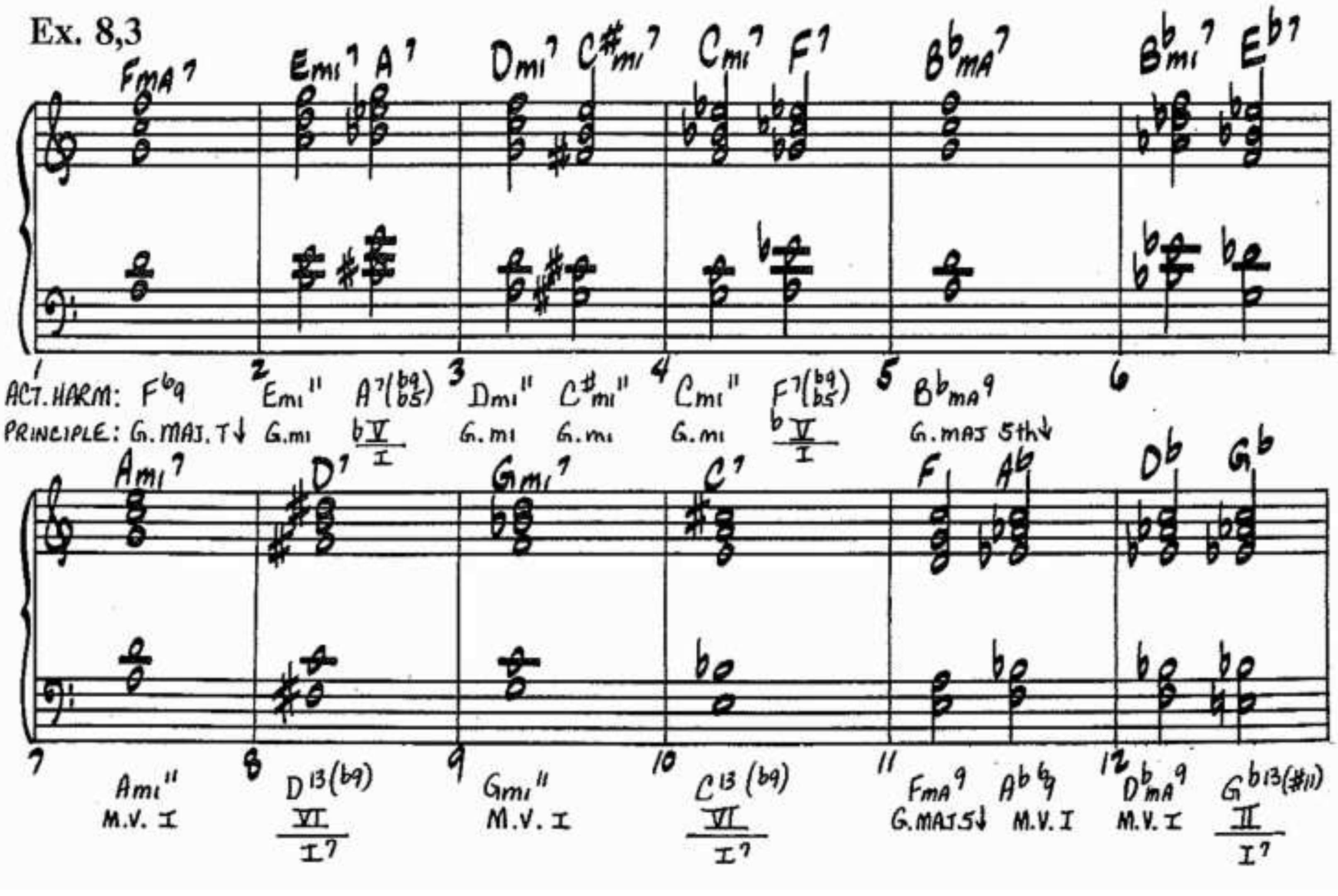
Ex. 8,2



Note that beginning in bar 7 we have the cyclical changes, I - VI - II - V - I - % with bars 8-10 using altered or suspended dominants. More importantly, notice that the soprano voice remains unchanged (glued) throughout the entire progression.

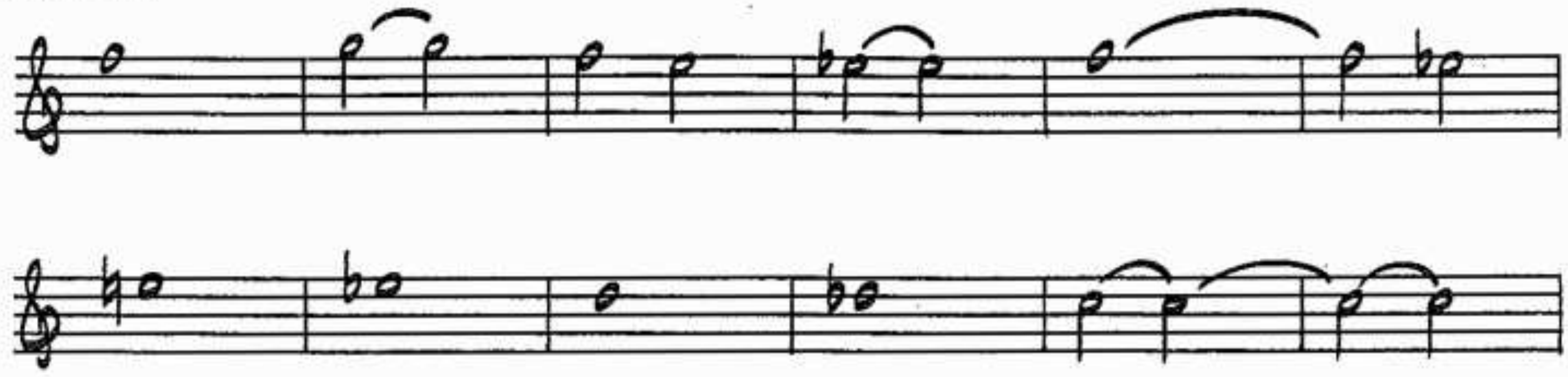
Ex. 8,3 alters the blues progression even more with alternate II-V's and the "Coltrane turnaround" (I - ♭III - ♭VI - ♭II) in the last two bars.

Ex. 8,3



Notice that the voicings of the chords in progression 8,3 move with minimal motion between adjacent harmonies and that the "Rule of Thumb" is in effect. Observe another prerequisite for successful comping: the logical melodic contour of the soprano voice. By tying all identical adjacent soprano notes, we derive the following:

Ex. 8,4

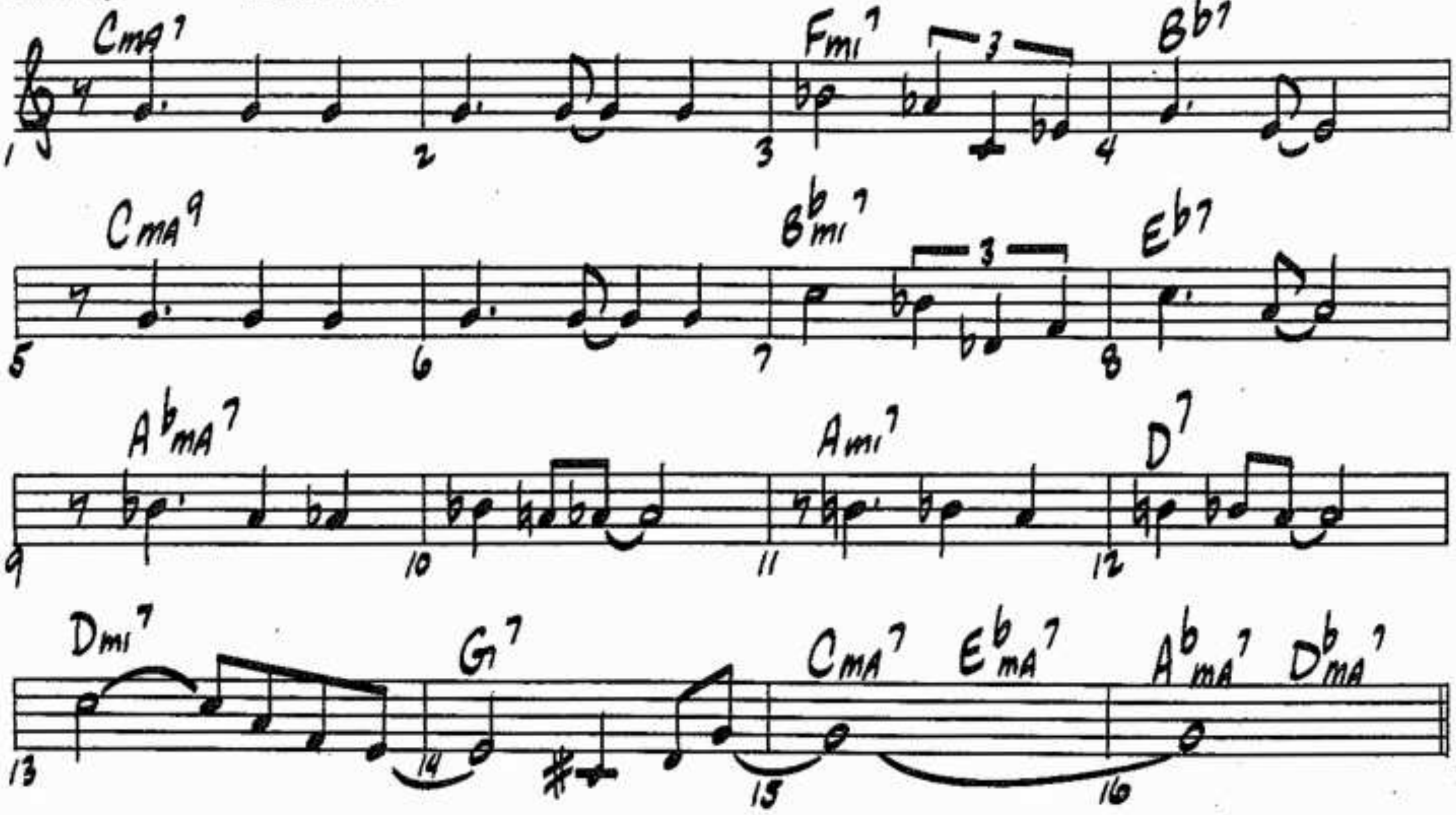


There are numerous other blues progressions. A Dan Haerle handout lists 16 Blues progressions with the footnote "Portions of these progressions could be combined with each other to combine hundreds of slight variations of the above." However, as long as we're aware of minimal motion, "Rule of Thumb", and the new concept of melodic soprano voice leading, there's no ground for anxiety even if there were one million possible blues progressions. We would just simply and logically use our harmonic vocabulary (Generic Voicings, Miracle Voicings, and Polychord Fractions) to accomodate the desired harmonies.

Let's now tackle the project of comping for a tune which doesn't use a blues progression, Tad Dameron's **Ladybyrd**.

Ex. 8,5 "LADYBYRD"

By Tad Dameron



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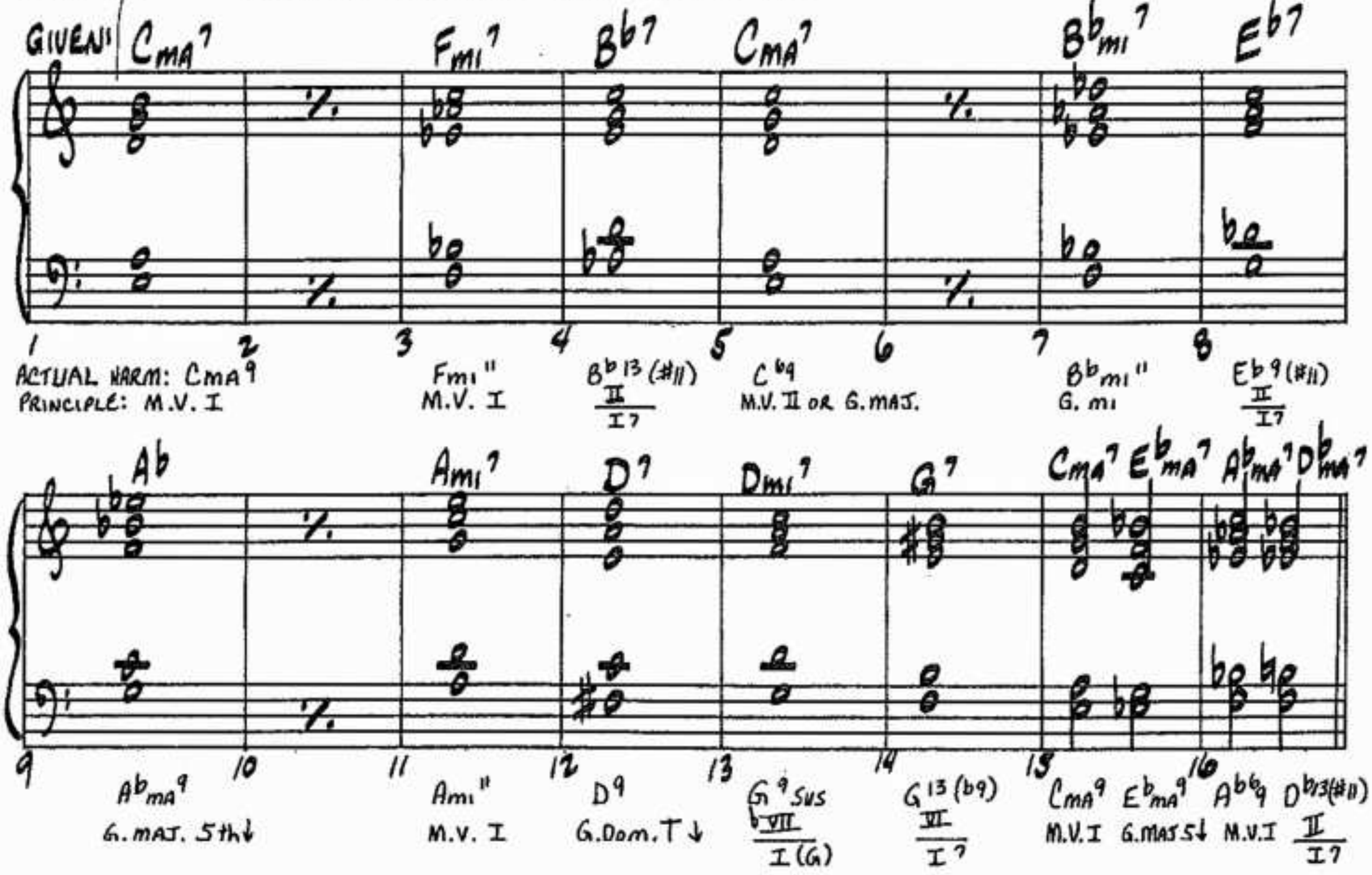
Ex. 8,6 offers a successful way of voicing the chord symbols to **Ladybyrd.**

Bear in mind that songs in lead sheet form, i.e. a single line melody with accompanying chord symbols, generally employ the simplest harmonic possibility for the chord symbol. It is therefore the pianist's option, if not responsibility, to embellish or sophisticate the given harmony. Of course, consideration must be given to the melody. The pianist may add extensions or altered tones only to the extent that they do not clash with the melody.

Ex. 8,6. POSSIBLE VOICINGS FOR "LADYBYRD"

By Tad Dameron



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Let's analyze 8,6 to ascertain why we did what we did.

Bar 1: M.V. I in the strong major function with the Ma7th as the soprano voice. Generic major constructions either from the tonic or the fifth descending would have functioned equally as well for the first bar.

Bar 2: %

Bar 3: The M.V. I Fmi11 was obtained by simply moving all 5 voices of the preceding harmony up ½ step.

Bar 4: Referring to bar 4 of Ex. 8,5, we see that the melody lands on the non-diatonic "E", which can either be analyzed as ♭5 or ♯11. Since the chord symbol for this bar (B♭7) is a dominant construction, we can employ the polychord fraction $\frac{II}{I7}$ to accomodate both melody and harmony. II Major triad in the key of B♭ is C Major. Tritone indicators D (3rd) and A♭ (7th) represent the denominator I7.

Bar 5: Simply for variance with bar 1, Generic Major (M.V.II) from the tonic descending supplies a C6/9 in approximation of the desired CMa7.

Bar 6: %

Bar 7: Moving all 5 voices of the Generic Major C6/9 in bar 5-6 up ½ step gives us a close approximation of B♭mi7, B♭mi11.

Bar 8: Refer to Ex. 8,5 to check the melodic symmetry between bars 4 and 8. Again, in bar 8, the melody lights on the #11 while the basic harmony is dominant. The fraction here is $\frac{II}{I7}$ or $\frac{F}{E\flat 7}$. Tritone indicators (3rd and 7th) suffice for the denominator, E♭7, while the right hands **moves as little as possible** from the preceeding construction in bar 7 to the nearest F Major triad.

Bar 9: Here's the Generic Major construction for the A♭ from the 5th descending. M.V.I (weak major) would have been closer to the previous harmony, but the ever-so-slight jump to M.V.II is justified by the stronger sonority.

Bar 10: %

Bar 11: The closest minor voicing from the previous is M.V.I (Ami11).

Bar 12: D7 is voiced as a Generic Dominant from the tonic descending (D9).

Bar 13: The G9sus (F/G) is the first radical deviation from the original harmony. Rather than have the soprano voice leap from the "D" in the previous bar to an "F" above (Generic Minor construction for Dmi) or to an "A" below (M.V.I minor function), I've opted for the nearest G9sus (F/G) since the ingredients (D, F, A, C, G) of a Dmi11 and a G9sus are identical.

Bar 14: Once again, I've taken the liberty to alter the lead sheet harmony, G7. The main motive behind selecting the alteration (♭9) was twofold: A. The parallel descending motion of the Right hand triad from the previous bar, i.e. F triad to E triad offers a nice tonal effect. B. The polychord fraction $\frac{VI}{I7}$ is a high tension dominant alteration which makes the resolution in the next bar aurally gratifying.

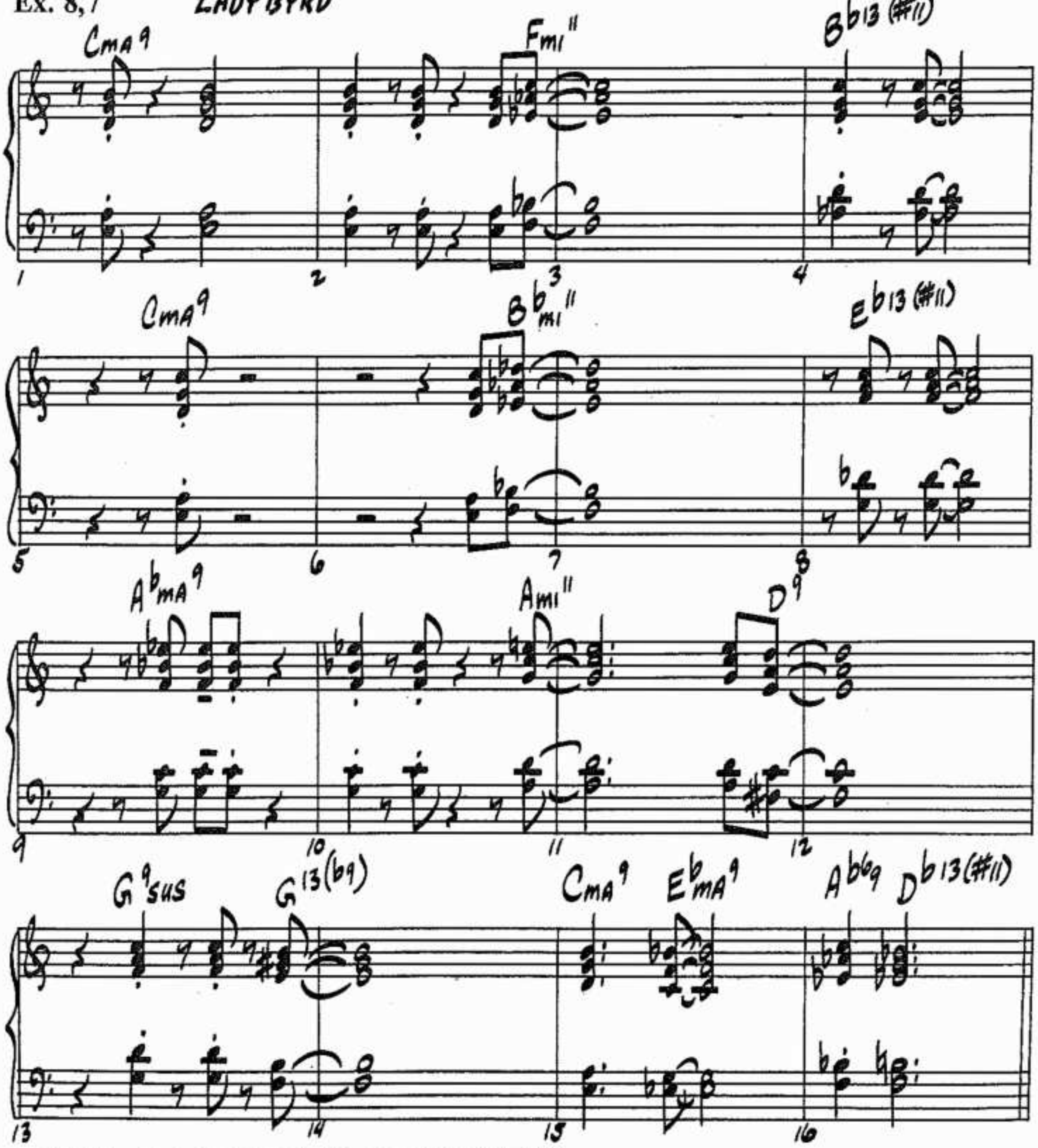
Bar 15: M.V.I as the resolution to the I (C Major, strong function) necessitates the least movement. For the E♭Ma7, I've moved to the nearby Generic Major, 5th descending. As this chord is constructed in a lower (but allowable) register of the keyboard, I've substituted the root for the Major seventh as the lowest voice. This avoids a potential "tonic clash" with the bassist.

Bar 16: M.V.I (weak major function) accommodates the A♭Ma7 while adhering to the "Rule of Thumb". The Polychord $\frac{II}{I7}$ for the altered dominant D♭13 (♯11) offers more tonal tension than a major voicing. However, it would also be possible to keep the M.V.I voicing for the duration of the bar since it functions for both A♭ and D♭ Major.

Obviously, in performance the preceeding bar by bar analysis and execution must happen spontaneously, with no time for deliberation. However, we now have covered all the voicings used in Ex. 8,6 and understand the logic involved in moving from one harmony to the next. Ex. 8,7 supplies the only missing ingredient to make our comping rendition of **Ladybyrd** sound like that of a master: rhythm.

By Tad Dameron

Ex. 8,7 "LADYBYRD"



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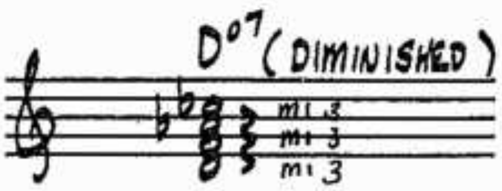
Practice Ex. 8,7 until it feels natural, or like "you wrote it". Using the same voicings quoted in Ex. 8,6, comp, but with your own rhythms.

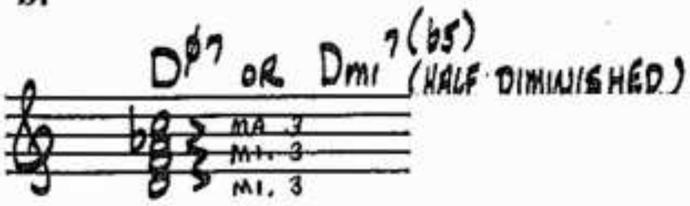
Chapter 9: VOICINGS FOR DIMINISHED AND HALF-DIMINISHED SEVENTH CHORDS

The principles of quartal chord construction are obviously impossible to implement with harmonies whose basic intervallic building block is the minor third.

Ex. 9,1a



b.

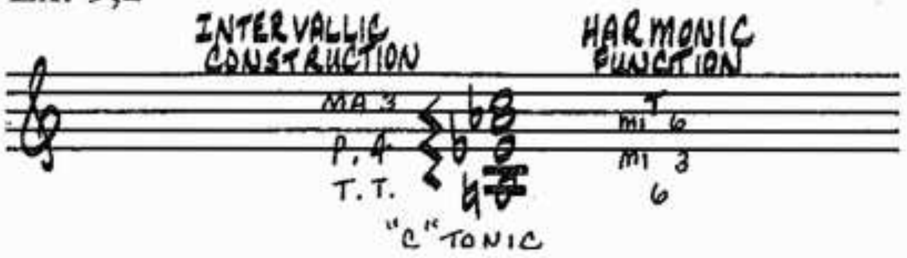


Therefore, a return to third city (tertial construction) is necessary to voice diminished and half-diminished seventh chords. There are, however, ways to restructure these harmonies so that when voiced, the sound is palatable and avoids the strict succession of stacked thirds.

For fully diminished sevenths, an alternative voicing is constructed as follows:

With the tonic note on top, form a major triad in second inversion. Add the tone a tritone lower than bottom voice of the inverted triad to supply a fourth voice. This is a 4-voice construction.

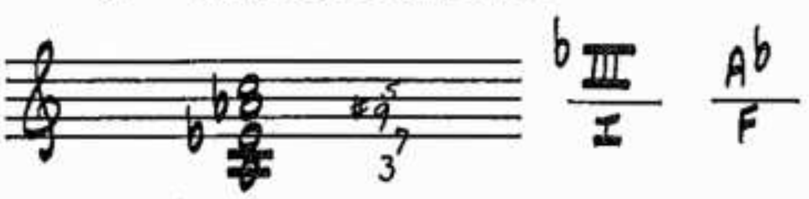
Ex. 9,2



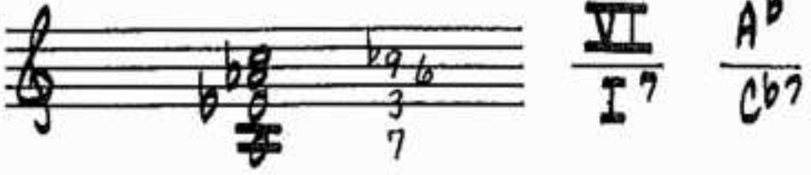
If we consider the top voice of Ex. 9,2 as the tonic, the second voice is indeed a non-chordal tone, having nothing to do with the parent scale, C diminished. It is rather the construction of this chord, i.e., the second inversion major triad over the tritone, plus the presence of both the A and A♭ which gives it a distinctive sonority.

Coincidentally, if analyzed with the tone "F" as the tonic, we have the altered dominant, F7(♯9), or $^{\flat}\frac{\text{III}}{\text{I}}$. This construction also serves "B" or "C♭" as a 13(♭9), or $\frac{\text{VI}}{\text{I7}}$.

Ex. 9,3 SAME CONSTRUCTION WITH "F" AS TONIC.



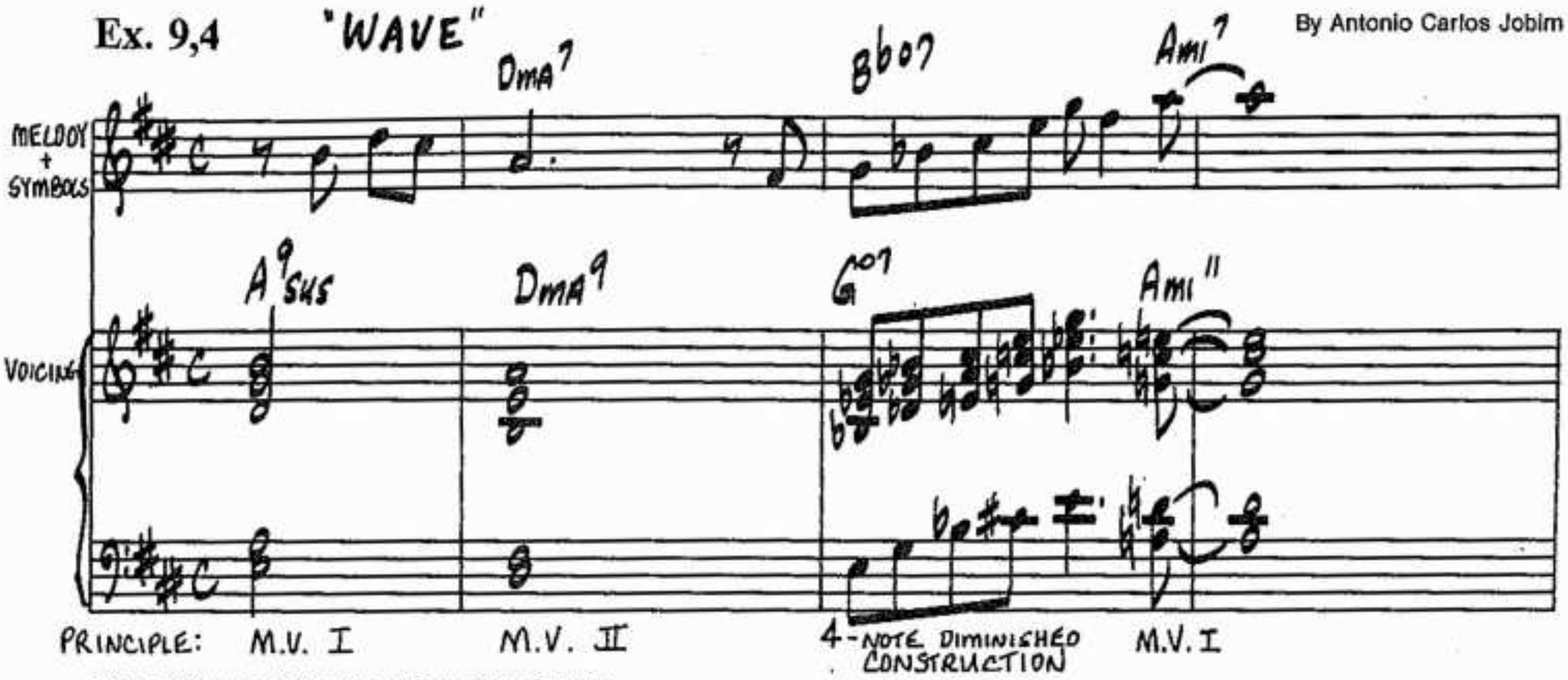
WITH "C♭" AS TONIC



How you choose to perceive this chord mathematically or intellectually is, however, not the issue. Simply stated, it sounds good in a diminished context. Let's use this construction in context of a standard tune, Jobim's "Wave".

Ex. 9,4

By Antonio Carlos Jobim



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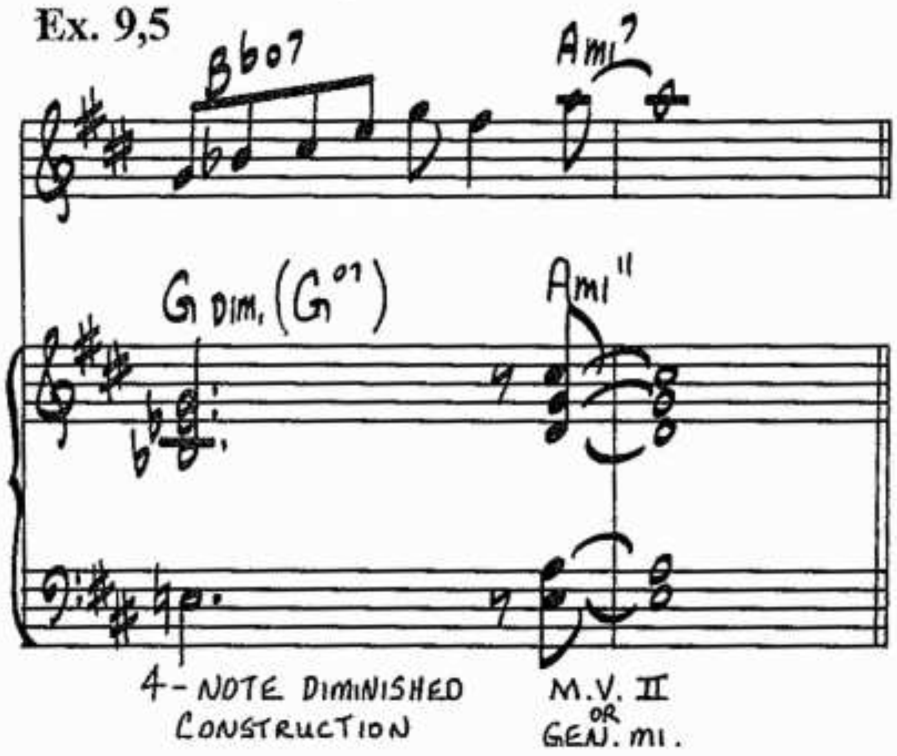
In example 9,4, I've constructed our diminished voicing (Ex. 9,4) from the "G" descending in the second complete bar, and sequenced this voicing at the interval of a minor third to move parallel with the melody. If tempo should make execution of this bar hazardous or impossible, a simpler solution would be:

Ex. 9,5



As in the case of strict tertial diminished seventh chords (Ex. 9,1a), our diminished construction can be inverted at the interval of a minor third. In other words, the following diminished constructions patterned after Ex. 9,2 are interchangeable.

$G^{\circ 7} = B^{\flat\circ 7} = C^{\sharp\circ 7} = E^{\circ 7}$
$F^{\sharp\circ 7} = A^{\circ 7} = C^{\circ 7} = E^{\flat\circ 7}$
$F^{\circ 7} = A^{\flat\circ 7} = B^{\circ 7} = D^{\circ 7}$